ACCOUNTING STUDENTS' SERIES

Accounting Principles

By

SAMUEL F. RACINE

Certified Public Accountant

Branch Office and Corporation Accounting Specialist and President The Western Institute of Accountancy, Commerce and Finance

1913

Published by
THE WESTERN INSTITUTE OF ACCOUNTANCY, COMMERCE
AND FINANCE
Leary Building, Seattle

Press of
LOWMAN & HANFORD PRINTING AND STATIONERY COMPANY

PREFACE

During the time we have been conducting the Western Institute of Accountancy, Commerce and Finance, we have been considerably handicapped by not having a book sufficiently complete or reliable as a treatise on the principles of accounting; correspondence with other colleges and universities discloses that they also have felt the need of a more authentic work on the subject, and this work is intended to provide such institutions, and also the hard working, conscientious, evening student with a book that will answer the requirements and will bridge the distance between Bookkeeping and Advanced Accounting. Our task has been not only to cover the field of the C. P. A. Examinations but also to confine the work within one volume.

The author wishes to express his sincere gratitude to his friends who so kindly offered suggestions and criticisms and to whom much of the merit of this book belongs.

SAMUEL F. RACINE,
Certified Public Accountant.

Seattle, 1913.

CONTENTS

CHAPTER V.

Classified Journals.

CHAPTER VI.

Cash Records.

CHAPTER VII.

Accounts—Contents.

CHAPTER VIII.

Individual or Specific Accounts.

CHAPTER IX.

Cash.

CHAPTER X.

CAPITAL AND REVENUE.

CHAPTER XI.

INVESTMENTS.

CHAPTER XII.

CAPITAL ASSETS.

CHAPTER XIII.

DEPRECIATION.

CHAPTER XIV.

GOODWILL.

CHAPTER XV.

LIABILITIES.

CHAPTER XVI.

SUBSIDIARY ACCOUNTS.

CHAPTER XVII.

RESERVES.

CHAPTER XVIII.

RESERVE INVESTMENTS.

CHAPTER XIX.

MISCELLANEOUS SUBSIDIARY ACCOUNTS.

CHAPTER XX.

Miscellaneous Collective Accounts.

CHAPTER XXI.

Trial Balance.

CHAPTER XXII.

Profit and Loss.

CHAPTER XXIII.

Balance Sheet.

CHAPTER XXIV.

Classified Journals—Continued.

CHART OF CONTENTS

ACCOUNTING PRINCIPLES

CHAPTER I.

Bookkeeping

Defined.

"The art of keeping a systematic record of business transactions, so as to show their relation to each other and the state of the business in which they occur; art of keeping accounts." (Webster.)

"The art of recording business transactions, with the view of having a permanent record of them and of showing their effect upon wealth." (Lisle.)

Methods.

As to the methods of keeping the records, bookkeeping may be divided into two classes: Single Entry and Double Entry.

Single Entry.

Single Entry, or Simple Entry as it is sometimes called, is a name given to any of the various plans of recording transactions which show them only in the relation they bear to persons. Its form and completeness depend greatly on the knowledge and ingenuity of the person keeping the records. In many cases there is just an ordinary ledger, such as is used in double entry bookkeeping, with date, explanation and money columns arranged for both charges and credits, and with an account or page for each person. The party keeping the record, records

the items or transactions in the order of their occurrence on either the debit or the credit side as the case may be. He usually dwells rather fully on the transaction in the explanation columns and keeps a fairly complete record.

Another plan often met with is that of keeping a memorandum of transactions, in the order of their occurrence, in a Blotter or Day Book, then transferring them into a Ledger, classified according to customers. This memorandum may take any form whatsoever. It usually gives the name of the person with whom the firm has dealt and also outlines the transaction fully, giving a list of the articles dealt in, the amount of money paid or received, etc. It is intended to be a complete history of the transaction and has been known to go even so far as to mention the witnesses to the transaction and their views as to a purchaser's prospect of paying the account. In the majority of cases some sort of an account is also kept to show the Investment or the Proprietary Interest in the firm. Owing to its many imperfections, it is gradually going out of use; however, it is still to be found amongst the uninformed and, as it offers a number of interesting points for consideration, it will be taken up again in another chapter.

Double Entry.

Double Entry is that form of bookkeeping which contains two records of each transaction, one a charge and the other a credit to the respective accounts affected.

This plan is impossible where only personal accounts are used and, in order to complete the double entry and to show the effect of the transaction on the business or institution, accounts are required, in addition, to record the integral units of operations—such things as Earnings, Expenses, Property or Rights acquired and Liabilities incurred in their acquisition.

As to completeness, Double Entry Bookkeeping may be divided into two classes, one showing the receipts and disbursements, the income and expenditures and the resources and liabilities; the other only showing the receipts and disbursements.

The former is known as the Capital and Revenue method and the latter the Receipts and Disbursements method.

The Capital and Revenue Method is used by all concerns conducted for profit, while the other is used only by those institutions which have no investment and which are not conducted for profit.

The object of every business is to increase the proprietary interest in the concern and, from the standpoint of the proprietor, the most interesting feature of the business is its effect on his investment; therefore, the most important object of bookkeeping is to record the growth or decline of Capital or Proprietorship. As only Double Entry Bookkeeping records the transaction from this standpoint, it is used almost to the exclusion of Single Entry.

With books kept entirely by Single Entry, the Profit or Loss of a given period is ascertained by a comparison of the Net Worth of the concern at one date and its Net Worth at some previous date. The tendency being to assume that all changes occurring in the Net Worth are due to the operation of the business and profits arising owing to the sale of Fixed Assets or from Outside Investments, although really foreign to the operation of business, are often included.

With complete Double Entry, the profit is not only ascertained as in Single Entry by a comparison of the Net Worth at different periods, but it is also ascertained by using the accounts representing the progress of the

business. These accounts contain all transactions which have an effect on the income of the concern and reflect the various causes that have produced the Profit or Loss. In addition to this, owing to the careful classification of the items, Losses or Profits that have occurred from sources outside of the business are separated from the Ordinary Business Profits or Losses and the effect of the operation of the business is not misrepresented.

Double Entry possesses so many advantages over Single Entry that many exaggerated claims are made for it; for instance, it is often stated that the Profit or Loss of a business can be immediately ascertained from books kept by Double Entry, and that Double Entry books at all times show accurately the status of the business for which they are kept; whereas, the Profit or Loss can only be ascertained from the majority of Double Entry books after an inventory of the assets, and even then, owing to the many theories as to the proper method of valuing the assets and to the impossibility of determining with any degree of accuracy, the true value of much of the property, the inventory value as stated is only an approximation and likewise the Profit or Loss resulting is but an estimate of the correct result. It is also impossible to determine accurately the proper value of property consumed in conducting the business and this also has a tendency to disturb the accuracy of the results.

There are also some items which, although of great value to the firm, cannot be placed on the books at all. The most important of these are the Skill and Experience of its proprietors or the Right to exercise some monopoly.

Often acts are performed during one period of operations which do not become an active liability until some later date. These acts occurred at the previous date

and, if Double Entry Bookkeeping did all that was claimed for it, the liabilities would appear in the books. They, however, are usually omitted until they actually demand attention.

Liabilities of this sort are known as Contingent Liabilities and, in general, if given effect at all, are simply appended to the Balance Sheet as a foot note. The principal ones are "Bills Receivable Discounted" and "Liability on Guaranteed Goods."

Municipal.

Municipal Accounting, although operated on the Double Entry principle of carrying accounts with inanimate things and of having a debit and a credit for each transaction, differs in the nature of the information it is intended to impart. In the majority of cases, the intent is to display only the receipt and the disbursement of money—special stress being given to the collection of taxes, licenses, fines, etc., and to the disbursement of funds rather than to the asset value of the purchase or the effect of the transaction on the Proprietorship.

The books of a Municipality, operated as outlined above, should be arranged so that reports prepared therefrom would disclose its ability to liquidate Current Liabilities and also the legal margin of its borrowing powers as these are the most essential things in estimating the value of its bonds and in considering the propriety of public undertakings.

Many municipalities are endeavoring to operate their accounts under the Capital and Revenue Method mentioned under Double Entry, but in a number of cases they are not having the success they anticipated, in fact, it is argued that so long as a municipalities' principal asset—the right to collect taxes—is of such a nature that it can not be placed on the books and that any State-

ment of Assets will fall far short of the actual condition of affairs, and also that, as the borrowing powers of a city is not estimated according to the value of its Ledger Assets, it is unnecessary and incorrect to keep municipal books in this manner.

Furthermore, as a Municipality is not operated for profit, it is claimed that the keeping of Revenue Accounts, the purpose of which is to display the sources and the disposition of the profit of an undertaking, is useless except for such subsidiary undertakings as Water Works or Electric Light Plants.

It seems, however, that so far as the expenses are concerned, there is no excuse for not giving them effect as they occur, in order to properly place the responsibility, and also that there is no excuse for not keeping a complete record of the various properties and articles purchased. To this extent, the original plan of Municipal Accounting can undoubtedly be improved.

C. P. A. Questions

1. Outline concisely the principles of single and of double entry. (XXX)

2. Define double entry bookkeeping and state wherein it differs from single entry bookkeeping. (Penn.)

3. Mention the methods of bookkeeping in general use. How is the profit or loss ascertained by the different methods? (N. Y.)

4. Wherein do Municipal Accounts differ from Private Accounts as to Capitalization and Revenue? (Penn.)

5. State what, in your judgment, are the principal defects of the prevailing methods of municipal accounting. What is your conception of the information that should be given in the periodic statements of a municipality? (Wash., '08.)

6. a. Name some of the differences between Municipal Accounting, as it is generally conducted, and Commercial Accounting.

b. Is there, in your opinion, any reason why Municipal Accounting should not be placed on a Commercial basis, and, if not, how can this be accomplished? (Wash., '07.)

CHAPTER II.

Single Entry

It is often said that one of the principal objections to Single Entry books is that it is impossible to prove the work. This is probably true in so far as it is impossible to take a Trial Balance in the sense of the term as applied to Double Entry bookkeeping; but there is nothing to prevent the proving of posting, which is virtually taking a Trial Balance, where a Day Book with Debit and Credit Columns is used in connection with the Ledger.

This is accomplished by totaling the Debit and Credit columns of the Day Book and also the Debit and Credit items, for the period under review, in the Ledger. The total charges as shown by the Day Book should equal the total charges as shown by the Ledger and the total credits of the one should likewise equal the total credits of the other; special care, however, should be taken to see that all accounts containing items referring to the particular period are included even though the accounts are ruled up.

Where a single column Day Book is used, it is usually thought preferable to prove the accuracy of the work by checking back the items in the Ledger to the original entry in the Day Book.

The Audit Of.

The work of an auditor has been divided into three classes:

The Detection of Fraud.

The Detection of Errors of Principle.

The Detection of Errors of Omission.

In the case of Single Entry Bookkeeping the work is accomplished in much the same way as in Double Entry —by verifying each item that occurs in the books and by locating and giving effect to items that have been omitted. Errors of Principle would hardly occur while Fraudulent Errors could be most easily covered and would demand the utmost attention on the part of the auditors.

Statement of Affairs.
Statement of Assets and Liabilities.

A Statement of Affairs or a Statement of Assets and Liabilities is a statement showing the Assets and Liabilities of a concern which has not kept its books on the Double Entry principle. It is prepared, either wholly or in part, from outside sources and displays the Present Worth of the concern as an amount representing the difference between its two sides.

A Balance Sheet differs to the extent that it is always prepared from Double Entry Books and does not contain, except probably as a foot note, any items that do not appear in the books.

The term "Statement of Affairs" is also used in reference to a statement prepared to show the probable value of the claims of the general creditors of an insolvent and a careful distinction should be made between the two forms. It is preferable, however, to always classify the Statement of Affairs of a solvent concern as a Statement of Assets and Liabilities thereby eliminating every possibility of confusion.

Ascertaining Profit,
Resource and Liability Method.

In ascertaining the profits for a particular period, first prepare a Statement of Assets and Liabilities and

ascertain the Net Worth or Propritorship by deducting the liabilities from the assets.

A comparison of this amount with the Net Worth as shown by the previous Statement of Assets and Liabilities or the Investment at the beginning of the period, after making due allowance for withdrawals, will show the Profit or Loss for the period.

A portion of the profit or loss resulting might be from sources outside of the business, such as the profit resulting from the sale of fixed assets or from outside investments, and care should be taken to see that the business is not given full credit and the profit or loss on ordinary business thereby mis-stated.

This plan of ascertaining the profit or loss of a concern is known as the Resource and Liability Method; while the plan of finding the Profit or Loss by the aid of the Revenue Accounts used in Double Entry is classified as the Loss and Gain Method.

Preparing a Profit and Loss Account.

Wherever it is desired to prepare a Profit and Loss account displaying the sources of profit of a concern whose books have been kept by Single Entry, it is necessary to tabulate the Ledger. This is accomplished by analyzing each account in the Ledger and tabulating the items under appropriate headings to correspond with the accounts of Double Entry. After completing the items in the Ledger, it is necessary to bring into the tabulation all outstanding items covering Earnings or Expenditures Incurred, whether or not received or paid.

This having been done and the columns having been totaled, the auditor is provided with complete Revenue or other accounts and can proceed with the preparation of reports the same as would have been made from Double Entry Books.

Changing to Double Entry.

In changing a set of books from Single to Double Entry, it is first necessary to prepare a Statement of Assets and Liabilities, giving effect to all items, whether included in the books or not. The Net Worth or Capital of the concern is also included in the statement and brings it into Double Entry form by providing equal debits and credits.

This gives a statement, the debit items of which equal the credit items. If all of the items are given effect in the Ledger, the Ledger will also balance and will be in Double Entry form. It is, then, only necessary to continue placing debits and credits of equal amount to keep the books in this form.

In giving effect to the items appearing in the Statement of Assets and Liabilities, it is thought necessary to provide a journal entry showing all of the Assets as debits and all of the Liabilities and the Capital as credits. All items that are already in the books are checked so they will not be posted again and those unchecked are posted to accounts appropriately headed.

C. P. A. Questions

1. You are asked to test the correctness of a set of books kept by single entry by applying the double entry system to the entries made. What would you do without writing a new set of books? Take as a basis the following Ledger accounts:

Dr.	John	Doe.	Cr.
1905		1905	
Jan. 2, Balance	$1000.	Feb. 2, Cash	$ 600
Jan. 20, Mdse.	500	Feb. 2, Disc.	12
		Feb. 2, Returns	400

Dr.	Richard	Doe	Cr.
1905		1905	
Jan. 25, Ft. Charges	$ 200	Jan. 20, Mdse.	$2000
Feb. 2, Acceptance	1500		
Feb. 2, Mdse. Ret'd	300		

(N. Y.)

2. How would you determine the profits for a given period from a set of books kept by single entry, the capital at the beginning of the period being known? (N. Y.)

3. How would you audit a set of Single Entry Books, and how would you prepare therefrom statements showing the results obtained by the business? (Fla.)

4. Define and differentiate the following kinds of statements:

(a) Statement of Assets and Liabilities.

(b) Statement of Affairs. (N. Y.)

5. How would you proceed with a Single Entry Ledger, presuming that you wished to prepare a report

showing Sales, Freight, Allowances for Returns, Expenses, etc.? (XXX.)

6. Robinson & Co., wholesale dealers in notions, whose books have not been kept by double entry, wish to improve their system of bookkeeping. Write a brief report, advocating double entry, setting forth the superiority of that method generally, and showing by specific reference to the mode of bookkeeping employed by them, the advantages that will accrue from the change. (N. Y.)

7. Your suggestion (see the previous question) as to a change of method having been approved by Robinson & Co., you have been instructed to make the change at the close of the fiscal year; state in detail how you would proceed from start to point of proof. (N. Y.)

8. On Dec. 31, 1907, the balance sheet of James Smith & Co. showed liabilities $90,000.00 and assets $190,000.00. The books are kept by single entry and the Statement of Assets and Liabilities of Dec. 31, 1906, showed the capital to be $98,800.00, of which A's share was $40,000.00; B's share $33,800.00 and C's share $25,000.00. Profits as follows: A, ½; B, ⅜; C, ⅛. During the year "A" drew $5,000.00, "B" $4,000.00 and "C" $3,000.00. Make up profit and loss and partners' accounts.

9. The Balance Sheet of The Alameda Supply Co., Jan. 1, 1907, shows the following state of affairs:

ASSETS		LIABILITIES	
Real Estate	$50,000.00	Capital Stock	$200,000.00
Plant and Machinery	85,000.00	Creditors, open account	16,000.00
Horses and Wagons	15,000.00	Bills Payable	30,000.00
Patents and Goodwill	20,500.00	Profit and Loss Account	30,500.00
Inventory	49,000.00		
Accounts Receivable	35,000.00		
Cash in Bank	22,000.00		
	$276,500.00		$276,500.00

A year later, Jan. 1, 1908, after an audit of the books and accounts, the Balance Sheet stands as follows:

ASSETS			LIABILITIES		
Real Estate		$52,000.00	Capital Stock		$200,000.00
Plant and Machinery:			Creditors, open account		17,000.00
Bal. 1/1/07	$85,000		Mortgage		25,000.00
Less dep	8,500		Profit and Loss Account:		
		76,500.00	Bal. last year	$30,500	
Horses and Wagons:			Profit this year	23,400	
Bal. 1/1/07	$15,000				53,900.00
Less dep	2,250				
		12,750.00			
Patents and Goodwill		20,500.00			
Inventory		65,000.00			
Accounts Receivable		33,000.00			
Agency Investment		15,000.00			
Cash in Bank		21,150.00			
		$295,900.00			$295,900.00

From the foregoing it will be seen that for the year a net profit of $23,400.00 has been earned, while the acsounts receivable are smaller and the cash balance on hand is less than at the beginning of the year, though no dividend has, in the meantime, been paid.

Prepare an account showing what has become of the profit earned. (Lisle), (N. Y.), (Cal.)

10. What procedure is necessary to change Single Entry books into Double Entry books? Gave an example using your own figures. (Pa.)

11. H. Johnson and J. Dinkle have been in partnership for a year, the books having been kept by Single Entry.

An examination of their affairs discloses the following Resources and Liabilities: Goods, $800.00; Cash, $85.00; Real Estate, $1,000.00; and account due L. B. Ross, $900.00; a note in favor of the firm, signed E. J. Jones, amount $1,500.00. Their investment was: Johnson, $385.00; Dinkle, $400.00.

Prepare a statement showing the profit for the year and make the Journal entries necessary to open new Double Entry books. Also prepare the Capital accounts showing the disposition of the profit. (XXX)

12. Statement of affairs of John Doe, Jan. 1, 1910.

Ledger Balances

	Dr.	Cr.
M. C. Grace	$165.00	
Jas. Hamilton		$76.85
Harold Wayne		472.65
J. B. Grayson	26.25	
The Ivy Press		65.65
Fredonia Hotel	67.98	
Mrs. Chas. Johnston	176.25	
M. B. Johnson	65.65	
Harold Jackson	345.95	
Jas. S. Martin	75.75	
John Doe, Investment, 1/1/09		5,000.00

Resources

Merchandise, Inventory	$354.50	
Fixtures	450.00	
Cash, per cash book	2,230.55	
Insurance, Unexpired	10.00	
Accounts Rec. as per ledger balances		

Liabilities

Bills Payable		$90.00
Accounts Payable, as per ledger balances		

From the above information open Double Entry books and ascertain the profit for the period under review. (XXX)

13. John Smith's books show that he has accounts outstanding to the amount of $14,500.00. They also show that he owes $7,345.00; $2,500.00 of which is a note in favor of his brother Harry. He estimates that his investment was $5,500.00, nearly all of which was merchandise.

An appraiser estimates that, in addition to what the books show, he has Real Estate to the amount of $9,000.00; Horses, $450.00; Wagons, $150.00; Merchandise, $65,000.00; Fixtures, $985.00. He owes the bank on notes $15,000.00 and also owes his brother $2,000.00 which does not appear on the books.

The Real Estate was purchased just prior to the time he entered business 5 years ago and cost him but $4,500.00.

From the above information open Double Entry books and show the amount of profit he has derived from the business during the time he has been in operation; taking into consideration that his living expenses amounting to $75.00 per month have been taken from the business in lieu of salary.

14. You are asked to prepare an account showing the profit earned by a concern for a certain period. The books have been kept by single entry and you gather from them the following:

Capital, $19,360; Cash, $2,600; Accounts Receivable, $15,600; Merchandise, $10,400; Fixtures, $1,650; Accounts Payable, $3,850; Bills Payable, $5,000; Merchandise used by proprietor, $800.

The Capital above set out is the balance of the account after $1,500 withdrawn during the period and $1,200 for salary have been charged up against it.

Set up a statement showing the profit and loss. (N. Y.)

CHAPTER III.

Accounts and Accounting
Accounts—Character

Accounts Defined.

"An account is a registry of pecuniary transactions; a written or printed statement of business dealings, or debits and credits, or of a certain class of them, or of other things subject to a reckoning or review." (Webster.)

Accounting Defined.

The act of preparing a registry of pecuniary transactions or of stating an account.

Accountant Defined.

An accountant is one who is skilled in designing and preparing records of pecuniary transactions and in stating accounts.

The term Accountant is often assumed by bookkeepers but this application of the term is erroneous, for accounting implies much more than mere bookkeeping. A reference to the chapter on bookkeeping will disclose that bookkeeping is the act of recording business transactions—the simple, mechanical process. The accountant is not only able to keep books but he is able to devise methods and design the form that books should take, for the use of the bookkeeper. There is also a distinction between an Auditor and an Accountant, for Auditing is inspecting and criticizing the work of others. We may therefore summarize as follows:

Bookkeeping is Mechanical.

Accounting is Constructive and Creative.

Auditing is Inspective and Critical.

Certified Public Accountant, Defined.

A Certified Public Accountant is one who, by virtue of his personality, knowledge and experience, has been able to satisfy a board of examiners, acting for the state, as to his honesty, integrity and efficiency in handling the affairs of Commerce and Finance. A person employing him is virtually assured by the state from which he received his certificate that he is competent to perform any work pertaining to the profession. His certificate carries weight in all financial institutions and, even though the Certified Public Accountant, himself, may be unknown to the institution, the fact that he has qualified and holds the proper certificate is sufficient to assure the accuracy and authenticity of his work.

In the case of a Public Accountant, who has not qualified, a report prepared by him can only be accepted amongst his little circle of acquaintances and then only after some excuse on his part for not possessing a C. P. A. Certificate. This excuse usually takes the form of a criticism of the examiners in the nature of an assertion that they are unfair to parties of his experience and fear the result were he possessed of a certificate and able to compete with them. This assertion, however, is usually entirely unwarranted; in fact, the examiners often go out of their way to have some conscientious and efficient accountant take the examination with a view of granting him a certificate provided he proves competent.

Their desire is to build up as strong an organization as possible and, surely, this can only be accomplished by granting certificates to all really high grade accountants

and by refusing to grant them, in every case, where the applicant is not up to the standard, so the public may have no trouble in discerning between the efficient and those otherwise.

Division of Accounts.

It is our desire to take up the study of the work of an accountant, viz., the devising of forms for stating accounts and the propriety of including certain items therein. We believe it will answer our purpose and will prove more advantageous to the student if we consider accounts in the sense of their being a simple narrative or statement of facts or occurrences, and will not attempt to classify them, as it usually done, as simple Debits or Credits or as to the finalty of the record. We will attempt to show how, by using some form that is adapted to the particular narrative, it may be more readily interpreted; may insure greater accuracy in reading or transcribing or may reduce the labor involved in classifying the events. We will also attempt to show the evil effect of careless classification, and the advantages to be derived by carefully grouping items of a class, and also by sub-dividing certain of these groups, carrying the important items of the group in one account and the minor items in others. In addition to this we will show how certain of the transactions may not only be displayed individually but may also appear collectively or in summarized form with advantage, as well as the object of and advantages obtained by so grouping them. First, though, we should consider the persons or things affected by the transactions, and this requires a classification as to Character.

Character.

As to Character, accounts may be Personal or Impersonal.

Personal.

Personal Accounts are accounts with persons and show the effect of the transaction on the various people with whom the institution has done business. In its broadest sense, this would include accounts with the proprietors and we will include the consideration of Proprietorship Accounts under this heading.

Personal Accounts with customers are usually of such an extensive nature that it is desirable to keep them in a book or books separate from the other accounts. They are usually divided into two sections; those to whom we sell and those from whom we buy. Each of these sections or groups may be given a separate book or, as is often necessary, a number of books may be assigned to one of the groups; for instance, the sales of a large wholesale house may be divided as to salesmen's territories or states covered; each state or salesmen's territory having a separate record or ledger.

The method of proving and of incorporating these ledgers into the general ledger offers many points of interest and will be considered under Controlling Accounts.

The accounts representing the Proprietorship in a concern may be divided into three classes, representing either the interest of the individual operating alone, the respective interests of partners, or the interest of a collection of individuals operating as a corporation.

In the case of an account representing the proprietary interest of a Sole Trader, it is customary to credit him with his investment and with any increases resulting from his operations. Decreases and withdrawals in the nature of funds or goods are charged to him. The adjustments to his capital account, however, are made, usually, at the end of each fiscal period; the individual items

being retained during the period in a subsidiary account under the heading, "Drawings."

In the books of a partnership, accounts are operated for each of the partners, the same as in the case of a sole trader, with the exception that where partners have agreed to invest a specific sum into the undertaking, their capital account would always show this sum irrespective of an insufficient investment, accruals in the way of profits, or deficiencies representing losses sustained.

To illustrate: "A" and "B" have entered into a partnership agreeing to invest $10,000.00 each and to share profits equally. "A" invests $8,000.00 while "B" brings in the amount agreed upon. There still remains a liability on the part of "A" for the $2,000.00 that he failed to bring into the firm. This should appear on the books as an account against "A".

At the end of a year, we will suppose a profit of $4,000.00 is ascertained. "A" and "B" should each receive credit for half of this sum. In "A's" case this could be used to write off his existing liability. While in the case of "B" the $2,000.00 would appear to his credit, subject to withdrawal.

Corporations, as a rule, do not carry any accounts in their general books with their individual stockholders. Exceptions might occur in the case of a close corporation but even then it is unusual.

The customary plan is to carry an auxiliary record to show the shares held by the individual stockholders. Usually this auxiliary record is entirely separate from any of the financial books and is operated entirely independent of them. Even where stock is only partly paid for or where dividends have been declared and remain uncalled for, accounts are not opened for the individuals; instead, they are treated as a class and one account an-

swers for them all. The details of the account being carried in some other convenient form.

Impersonal.

Impersonal Accounts are accounts carried in Double Entry books with inanimate things representing the Integral Units of Business. They may be either Real, as representing actual Property or Rights in possession, or they may be Nominal, representing the effect of each transaction or class of transactions on Revenue, as Sales, Wages, etc.

C. P. A. Questions

1. In contra-distinction to the duties of an Auditor, what are, generally, those of an Accountant? (Cal.)

2. Explain the following accounts:

Personal.
Real.
Impersonal.
Nominal. (Penn.)

3. Define:

(a) Bookkeeping.
(b) Accounting.
(c) Auditing,

and show the relation of each to the other. (Wash.)

4. What advantage has a firm or corporation in employing a Certified Public Accountant for the work (auditing). (Wash.)

5. Name the different classes of accounts. (R. I.)

6. "A", "B" and "C" agree to start in business with a capital of $400,000.00, of which "A" is to furnish $200,000.00; "B", $100,000.00, and "C", $100,000.00. "A" is to have a ½ interest in the business and "B" and "C" each ¼ interest.

"A" contributes $200,000.00; "B", $90,000.00, and "C", $80,000.00.

How would the capital accounts appear on the books at the end of the year? (Adapted from N. Y.)

7. What is the relation of nominal accounts to real accounts? How do these accounts fulfill the purpose for which they are created? (N. Y.)

CHAPTER IV

Accounts—Form

We believe, for the purpose of this book, it is unnecessary for us to explain the functions of the Date, Explanation, Folio and Amount columns used in separating and classifying the various elements of the usual business transaction and that we may start at the point where these columns are grouped into a form desirable for displaying a simple chronological record of transactions as a class.

Simple Chronological Record.

Such a record would contain the columns mentioned above, in the order they are given, and would be desirable for use in recording such items as Cash Receipts, etc.

If it were desired to include the Cash Payments in the same record, it would be necessary to deduct each individual credit from the debits to ascertain the amount of cash on hand from day to day.

This reminds us of the stubs of a check book provided with but one amount column on which a bookkeeper had endeavored to keep a record of his bank account. He started out satisfactorily and got the first page correct. On the second page, he made an error and immediately corrected it. On the third or fourth page, he made another error but did not discover it until the end of the month while reconciling his cash account; then, in trying to correct, he changed every total or balance of the fifteen pages that contained entries made during the period in which the error was undiscovered.

The plan of recording was very simple and probably, owing to the necessity of carrying forward balances after every few items, was as good as any but, when it is not necessary to start a new page after every two or three entries, it is better to classify the debits and credits and provide a column for each.

This can be accomplished by simply adding another money column to the right of the one already used and by entering the debits in the first column and the credits in the second one.

Journal Form—Debits and Credits Widely Separated.

Or, if preferable in any particular case, instead of attaching another column on the right, the additional column could be placed on the left in the portion usually allotted to the date but the new column would now contain the debits and the other the credits as it is desirable to always keep the charges and credits on their respective sides. An additional Folio column would now be required and would be placed to the right of the new money column and between it and the explanation column. The date would be inserted in the information column between each transaction, thus:

Journal, January, 1911.

Dr.	Folio	Explanation	Folio	Amount
		1st		
245.00	3	Cash		
		H. Watson	27	135.00
		Bills Rec.	11	110.00
		Pd. his a/c and note in full		
		1st		

The principal value of this particular arrangement is that the Debit and Credit items are widely separated and

the danger of posting Debits as Credits or *vice versa* is considerably reduced.

Ledger Form.
Standard.

The above forms are quite desirable where items occur in chronological order and where such chronological arrangement assists in reference to them but, where the chronological arrangement of the events as a class is of lesser importance than distinguishing between the Debit and Credit items, it is preferable to arrange two separate and complete chronological records similar to those outlined at the beginning of this chapter.

Each of these records will include columns for Date, Information, Reference and Amount and they will be displayed side by side, the Debit on the left and the Credit on the right.

The order of the columns or the amount of space allotted to each is subject to considerable variation and this will require additional consideration on our part.

Ledger Form to Facilitate Reference
Between Debits and Credits.

In the case of a Journal, it is usually considered advisable to show the Debit and Credit Money Columns as widely separated as possible, or at least to take a considerable amount of precaution against posting one class of items as the other, but in the case of a Ledger, the opposite rule seems to hold and, in general, it is thought desirable to arrange these columns to facilitate reference as much as possible.

One of the best plans of Ledger rulings, used with this end in view, is that wherein the money columns are placed

close together; the date columns in this case being placed at the edges of the page.

The order of the columns would be Date, Explanation, Folio, Debit Amounts, Credit Amounts, Folio, Explanation and Date.

Ledger Form—Showing Balances.

There is also a feature, used in connection with the form outlined above, that is rapidly coming into use. It consists of placing between the money columns, still another column into which the balances of the account are extended. There are a number of derogatory features, however, which we believe should be mentioned in connection with this form, the principal one of which is the tendency of the bookkeeper to use only a pencil when computing the balances and, this, usually detracts greatly from the appearance of the books. It is also necessary, if full benefit is expected to be derived by the use of this form, to start the first entry for a new month, be it debit or credit or even though there are numerous vacant lines above, at a point at least one line below the balance, thereby grouping all items referring to a particular month between the balances as shown at the beginning and end of the period.

Additional Columns for Monthly Totals.

In the case of a firm whose books must show all transactions immediately after they occur, it is sometimes very difficult to prove the books owing to the necessity of continuing with the posting from day to day even though the books are out of balance. This difficulty can be eliminated by using the standard ledger forms and by adding a money column to the right of each of those already in use; then showing the total of the debits and the credits, either for the current month or to date, on each of the

respective sides, in these columns. Additional entries can then be made without disturbing the work of proving the previous month. The "Balance" form mentioned above is also of value in this respect if properly operated.

Detail Columns.

Often in displaying an account it is desirable to show in detail the items that comprise it.

This is accomplished by placing a column to the left of the one in which the item to be explained is shown and showing in this column all of the items comprising the total.

The most familiar example of detail columns is the invoice such as is provided by tradesmen to show the indebtedness for goods purchased. In this case, usually, but one detail column is necessary, although as many can be used as is required.

Combined Accounts.

There are some accounts which are so closely allied that it is desirable to display two or more of them in the same account.

Take, for instance, income producing property—stocks, bonds, etc. In each case it is desirable to distinguish between the Income derived on the Asset and any increment or decrement that it sustains during a particular period and also to retain all of the items in the same account. This result is obtained by carrying two money columns on each side of the account; the first on either side being used to record the items relating to Income and the second to record all other items. It is then possible, at a glance, to ascertain the income which each investment has produced as well as the amount invested and the nature of the investment, and, if the Asset

has been disposed of, the profit or loss resulting on the transaction.

Probably the most common use of Combined Accounts is in connection with the accounting of estates where often a very careful apportionment of Corpus and Income is necessary and where the two classes of items are carried in separate columns throughout the books.

In the accounts pertaining to the issue and the payment of stock of a corporation, it is very desirable to show the number of shares held by a person as well as the amount he owes thereon in the same account; therefore, the two accounts are combined and shown under the one heading similar to the illustration outlined above.

Wide Explanation Columns.

We believe we have fully covered the different forms of displaying the amounts and the dates and we will now take up a study of the Explanation Columns.

The most common variation of these is found in ledgers where considerably more information is required in explaining one side of the account than in explaining the other, for example:

In the case of a branch office, all invoices to the Home Office would be most fully explained in the Ledger to facilitate the preparation of a statement of the account to forward the Home Office and would require considerable room; while the credits to the Home Office Account in the Branch Books would probably be shown in total and would require no explanation at all, except the reference to the page of the Journal on which the distribution of the invoices was shown. A ledger with an exceptionally wide Debit and a narrow Credit column would consequently be preferable in this particular case.

Special Information.

There are also cases where the utmost detail is required in the explanation column, as in the case of a brewery, where it is necessary to distinguish between the charge for containers and the charge for product; the containers probably being divided into a dozen different sizes or styles and the product into three or four classes, each of which would require a separate column.

Leaders.

In a book as wide as would be required to contain the number of columns mentioned above, it is often hard to follow a line across the page.

Some of them may be ruled in red ink—usually every fifth one—thereby making it very easy to distinguish between the lines and to follow the particular one required.

Proving Postings.

The use of additional columns may also serve another purpose in addition to giving a more detailed record of the transaction, viz., they may be used to assist in proving the work.

Folios Classified.

By arranging additional reference columns to allow one for each book of original entry, it is possible, although possibly impractical, to sort out the amounts to which they refer and to classify them according to the sources of the entries; then, in proving the work, the total of the items posted to a ledger from any book of original entry may be ascertained by totaling the items which have an entry in the column that refers to that particular book. This total should agree with the total of the items as shown by the book of original entry and an error in post-

ing could be localized to one particular book by a comparison of the amounts.

Amounts Classified.

A similar plan may be followed, in connection with the amount columns, without having recourse to the reference columns. Of the two plans, the latter is usually used as it deals directly with the amounts in question and, thereby, reduces the possibility of errors in proving.

Boston Bank Ledger.

The most important use to which this plan has been put is in connection with the record of depositors' accounts in a bank. In this particular case it is essential that the books be balanced every day and that they show, at all times, the exact status of each account. In order to facilitate the work, columns are used for Balances at the beginning of each day, Deposits made during the day, Checks cashed, and Balances at close of business. The first column was proven at the close of business on the previous day. All deposits are entered in the next column and all checks in the third column. Each of these columns is proven individually by making the totals agree with the total of deposit slips or checks entered. After the entries for the day are known to be correct, it is a simple matter to ascertain the correct balance for each individual account and also the total balances.

In ascertaining the balance of each account, it is necessary to take the original balance, add the deposits for the day and deduct the checks; therefore, the totals of the columns containing the original balance and the deposits should equal the columns containing the checks and the new balance.

If this is true in the case of one account, it is also

true of any number of accounts; therefore, all of the accounts may be proven, *en bloc,* or any page or section may be proven individually and an error, if there is one, localized to a particular page or section and later to a particular account.

Membership Ledger.

In the case of Clubs, Lodges, Banks, and similar institutions, where there are usually but few entries to an account between each period of balancing, it is customary to include a considerable number of accounts to a page, allowing only a few lines to each one; each page or section is then considered as one account and treated accordingly.

It is also customary to dispense with the Explanation Columns entirely as, in general, the charges to all accounts are similar and a column is provided for each class of items making it unnecessary to further explain the transaction. A special column, usually on the extreme left, must, however, be provided for the names of the accounts.

As an example, take a club or a telephone company. In each case a charge is made to each account at a stated period to cover services for that period; therefore special columns are provided for the names and for each period's charges. Usually there is a fine or penalty for arrears and, in order to facilitate the work, the books are usually closed on the day the penalty accrues. The balances due on the accounts are extended into a specially designated column, and in still another column an amount is entered, after each balance found in the balance column, to represent the penalty. These two items form the nucleus of the new month's accounts.

If, as is usually the case, additional charges are made to represent special services in the nature of long distance calls, etc., they are kept in memorandum form un-

til the end of the period, when they are entered, in totals, in a column specially provided for the purpose.

Credits to accounts are also cared for by the aid of special columns.

Narrow or Short Pages.

In the case of banks in particular, new pages are required at very short intervals and, in order to eliminate the necessity of re-writing the names for each new page, it is customary to perforate the sheets on the perpendicular line that separates the names from the amounts; then, instead of copying the names onto each new page, it is only necessary to remove the end of the new sheet at the perforations and thereby allow the original set of names to be used in connection with the money columns on the succeeding page or series of pages.

Different length pages may be used wherever it is necessary to carry the totals forward from page to page at short intervals. In this case, the first page used at the beginning of a period will be considerably shorter than the rest and each succeeding page will be just one line longer than its predecessor, so that the total of the items on any page will never be covered by the preceding page and so that the totals may in turn be totaled without turning the pages. Although this plan is desirable in many cases its use is limited to cases where not exceeding ten or twelve pages are to be used, otherwise the short pages would be too short for any use.

It is also possible to use sheets in a loose leaf binder in such a way that the totals of one page will not be obscured by the succeeding page and so the totals of the one may be included in the totals of the next without rewriting. This is accomplished by cutting one line off either the top or the bottom of every page except the first

of any particular period and by using them in such order that the totals of any page will always appear either above or below the next page.

When the first page is totaled at the bottom, as is usual, the succeeding page should be one of those with the lower line removed. After it is in place the totals from the first page will remain in view and may be included with the items of that page when ascertaining their total. In this case, however, the totals of these pages must be placed at the top of the new page so that when the third page of the series, the one with the top portion removed, is in place it will still remain in view and may be added with the items on that page. The totals in this case being placed at the bottom of the sheet. It will be noticed that the totals will alternately appear at the top of one page and the bottom of the next.

Questions for Written Work.

1. What advantages are to be derived by widely separating the Debit and Credit amounts in a journal?

2. Distinguish between a journal and a ledger as to use.

3. What advantage is to be derived by placing both money columns together in a ledger?

4. Could the form referred to in question 3 be improved upon in any way?

5. Explain the form used where it is desirable to maintain the sequence of dates.

6. Outline three forms of ledger ruling each differing from the standard form. Mention the points of superiority over the common form of each of the three special forms, for the purpose intended. (N. Y.), (Ill.)

7. Rule a ledger for use under the following conditions:

Allowing an easy comparison of amounts,
An extra column for balances,
Considerable detail in explaining the debit entries.

8. Prepare a Ledger ruled in such a way that the totals of each column will represent the total of one of the books of original entry.

9. Prepare a Ledger for the use of a business, having 1,000 accounts, in which it is necessary to know the total Charges and Credits to each Ledger daily and where it is also necessary to know the balance standing to the Credit of each account daily.

It is also necessary that the balances be arranged in

such a way that they can be easily totaled and their sum ascertained.

There are usually but few entries to an account each day.

10. Prepare a Ledger for a Telephone Company which makes monthly charges to account for service and also for Long Distance calls.

Where payment is not made before the tenth of the succeeding month an additional charge is incurred to cover cost of collection, etc.

For convenience, the books are balanced on the tenth of each month.

11. Prepare a Ledger Ruling for a Brewery, arranged so that each account will show the number and kind of package and the number of the delivery receipt which in turn contains the serial numbers of the packages. The Account should also show the charges made for Keg beer, Bottled beer and Packages separately as well as the total charges of each shipment.

The credits should be divided to show the credits on packages separate from the credits on beer.

The beer is bottled in two sizes. Boxes are arranged to hold a dozen of each size and barrels are prepared for export trade, each containing 5 dozen quarts or 10 dozen pints.

The kegs are of three sizes.

12. Prepare a Ledger for a Club which charges an admission fee of $50.00, monthly dues of $5.00 and also additional sums for special privileges. Fines are charged to the accounts where the members fail to keep up their dues.

13. What form of ledger would be appropriate for an enterprise in which the accounts bear interest at 5%

per annum on current transactions? Illustrate a Ledger account in detail showing the method of computing the interest and balancing it into principal semi-annually. (Ill.)

14. Illustrate the use of a series of cut pages in a book of original entry. Each page being one line longer than the preceding one used.

15. Illustrate the use of cut pages where the top of one and the bottom of the next is removed.

CHAPTER V.

Classified Journals

Under the old system of bookkeeping, it was considered necessary to not only make an immediate memorandum of the transaction but also, at a more opportune time, to re-write it showing the accounts and the effect thereon. Each entry was considered individually and it was believed necessary to show, in the ledger, a chronological record of all transactions affecting an account. In order to accomplish this result, it was necessary to make at least two postings for each transaction and in a business of any size the system was unwieldy and expensive. Under the stress of urgent necessity various plans have been adopted to reduce the labor and expense involved.

The principal of these consists of classifying the items according to accounts affected and, instead of posting all of the items affecting an account to the ledger, showing a detailed list in the book of original entry and only posting an amount representing the total of the items, to the Ledger. Those items which make up the total, would, of course, be posted individually to their respective accounts.

In many cases the items affecting an account are so numerous that a separate book should be used for recording them, as in the case of Sales, Purchases, etc., but in other cases the entries to an account might not exceed a dozen or so, in which case a page or so in the Journal could be allotted to the entries affecting each important account and the plan of posting totals given effect.

In general, there is but one posting made to represent the total of the items entered in the book or on the

alloted pages for a particular month, but in some cases it is desirable to further subdivide the items, in which case, additional columns are used and the individual items are distributed into these columns as to sub-accounts affected.

Sales Book.

For example, take the case of a merchant selling some particular article; he would have numerous charges to customers but only one credit, viz., to Sales account, and a chronological record of these would possibly answer his purpose. Suppose he should increase his line or desire to analyze his sales—let us say into Machines and Supplies; it would then be necessary to provide columns, under each of these headings, into which the items making up a sale could be distributed.

Tabular Proof.

If, as is usual, the original column representing the total of the sales was allowed to remain and all items making up a sale were also extended into the distribution columns, the items in the amount column on any page or series of pages should equal the total of the items in the other columns.

This is, probably, one of the best examples of Tabular Proof and is mentioned as it is one of the principal advantages of Columnar Books. It should be used wherever possible in this connection.

Invoice Book.

If a dealer's purchases are numerous, he should provide a book for the purpose of recording them. In some cases this would take the form of a scrap book into which all incoming invoices would be pasted. The amount

of the invoice would be extended into a column provided for the purpose, and would be posted to the credit of the personal account affected. The column would be totaled to ascertain the amount of purchases and this sum would be posted to "Purchase" account and would counterbalance the various credits to the personal accounts.

Purchase Journals.

If he preferred, he could use the Chronological Journal Form for recording these items, in which case he would require columns for the date of invoice, the name of the creditor, the terms of the invoice, the day it would become due and the amount.

If, as stated above, he should decide to analyze his sales it would also be advisable to analyze his purchases, in which case he would require additional columns to correspond, into which the distribution could be made.

Questions for Written Work

1. Prepare a Sales Book for the use of a foundry and machine company in recording its sales. The following information being required:

Date of Sale, Folio, Name of Purchaser, Items Sold, Selling Price of each item, Amount of Sale.

2. Prepare a Sales Book similar to the above but allowing in addition for the distribution of the Sales into sub-accounts as follows:

Foundry Account.

Boiler Account.

Engine and Machine Account.

3. Illustrate the Tabular proving method by the aid of figures and entries in the form you have prepared in answer to the preceding question.

4. Prepare a Purchase Journal for use under the following conditions:

It is required to show Invoice Number, Date, Name of Creditor, Terms, Due Date and Amount of the Credit to the Personal Account.

Charges will be distributed over Merchandise Purchases, Freight, Trade Expenses and Sundries.

Folio Columns are to be properly placed for easy reference.

CHAPTER VI.

Cash Records

In each of the cases mentioned in the previous chapter, some particular class of items has been removed from an account in the ledger and their total substituted; at most, only one side of the account has been removed and there would still remain a number of entries to the account in addition to those represented by the totals. Other cases arise, however, where almost the entire account is taken from the Ledger as in the case of the Cash Account, where, if any mention of the account is made at all, it is only to show the total charges and credits to the account for the period.

Two Column Cash Book.

In this case, as the entire account is to be removed and as it is now to appear in a separate book, and, furthermore, as the entries therein are to be both the original entry of the transaction and the final entry of the cash account, it becomes necessary to provide columns for both debit and credit entries, each of which will represent one side of the Cash Account.

When a two column cash book is used, it is necessary to post every item appearing on either side of the Cash Book to the opposite side of some other account in the ledger; then, in order to keep the ledger in balance, the

total of the respective sides is posted to the same side of the Cash Account in the ledger.

Tabular Cash Book.

The plan of classifying the items and extending all of those in certain predetermined classes into separate columns and posting the total of the class instead of the individual items, is applicable to Cash Books as well as to other books of original entry but, in the case of Cash Books, the original column is used in connection with miscellaneous entries that might arise for which no special column has been provided, instead of as a tabular proof column, although the plan of tabular proof is applicable if desired.

As an example, let us take the case of a sole trader whose cash receipts consist of payments made by customers, on account, and also of cash received from the sale of merchandise. His payments are to people from whom he has made purchases on account and also for Expenses, Freight, Express, etc. If the two column Cash Book were used, each item would be posted in detail to its individual account but, let us presume that in addition to the original columns, he had provided columns into which the Expense, Freight, Express and sundry items of a class were entered; it would then only be necessary to post one item, representing the total of each special column at the end of the period, instead of the numerous items which would be included in that total.

Discounts in Cash Book.

Let us presume, also, that a number of his customers were in the habit of discounting their bills and also that

he discounted his bills. In this case the cash involved would be slightly less than the amount of the account which it was intended to pay and a credit or charge would be necessary, from some source, to make up this difference.

The entry, to adjust, could be made through the Journal individually, or, if the items were numerous and it was considered advisable to use the Journal for this purpose, a page or so could be alloted to "Discount Account" and the plan of posting totals, as outlined, could be used; in general, though, it is considered advisable to carry the Discount Columns in the cash book, either as memorandum columns or as regular cash columns.

If they were used as memorandum columns, they would appear on the same side of the cash book as the entry representing the amount of the actual cash involved, and the entry in the Cash Book proper would be the net amount received or paid on an account.

All of the items appearing in the Discount Columns would be posted individually to their respective accounts and the total would be posted to "Discount on Sales" or "Discount on Purchases" as the case might be.

The Discount Items would not enter into consideration when balancing the Cash and would have no connection with it; in fact, there would be virtually three separate and distinct accounts in the cash book, one for Cash, debit and credit, one for Discount on Sales and one for Discount on Purchases; each of which would be considered separately.

If it were desired to reduce the number of postings to each of the Personal Accounts by making but one

posting of the gross amount instead of two postings—one for the Cash item and one for the Discount—it would be advisable to transfer the Discount Columns to the opposite sides of the Cash Book and to embody them in the Cash Account. The entry covering a Cash Item and a Discount, in this case, would be a charge or a credit to Cash for the gross amount, with a contra-entry to the same account (Cash) to adjust the difference between the amount entered and the actual amount of cash involved.

The plan of carrying memorandum columns and making two postings offers a number of advantages which more than repay for the extra work involved.

From an auditor's standpoint, the entering of the net amounts is preferable as it facilitates tracing cash receipts into the bank and also as it allows each personal account in the Ledger to accurately display the mode of settlement.

From a statistical standpoint, the plan of recording Gross Items on one side and Deductions on the other, to counterbalance, is entirely incorrect, as neither side of the Cash Book would accurately display the receipts or disbursements and an attempt to use the totals as such would be inaccurate and misleading.

Bank Columns in Cash Book.

In the Cash Books just outlined, the bank was not considered and if any funds were on deposit in a bank the amount thereof would, necessarily, be included with the cash in the drawer when balancing.

If it were desired to distinguish between the proportion of cash avails which were with bankers and the

amount in the drawer but still not carry a Bank Account, memorandum columns could be used on each side of the cash book into which the deposits and withdrawals could be recorded, the deposits on the debit side and the withdrawals on the credit side. In this case, the cash receipts would be debited to Cash; but as the cash drawer would not be considered separately from the bank, no credit to Cash would be given for funds deposited; likewise withdrawals would not be charged to Cash. This plan is most often found where all receipts are deposited in the bank and where all payments are made by check.

If it were considered preferable to distinguish between the Cash and Bank items and to carry separate accounts for them in the Ledger, it would be necessary to credit cash with all deposits and, if the Cash Book was still to be used for recording payments made by check, to charge cash with all withdrawals. This would necessitate standard columns on each side of the Cash Book to care for the Bank items.

Daily Balance Book.

In the case outlined above, the cash balance would represent only the amount of cash in the drawer and, in order to have a record of the total cash avails, it would be necessary to provide some sort of an auxiliary record which will combine the Cash and the Bank items.

This record usually takes the form of a Daily Balance book into which a complete record of both the Cash and the Bank items is made.

In form, the book would be ruled similar to the following, and would, possibly, be printed three to the page, allowing six forms to be displayed when the book is opened—this number answering for a week's balances.

DAILY CASH BALANCE BOOK...............1913

Bank Balance, brought forward			X
Cash Balance, brought forward			X
Cash Receipts:			
....		X	
....		X	
....		X	X
			XXX
Cash Payments:			
....		X	
....		X	
....		X	X
Cash Avails:			
Bank:			
Balance, as above	X		
Deposits	X		
	X		
Withdrawals:	X	X	
Cash:			
Checks	X		
Currency	X		
Specie	X	X	X
			XXX

In Chapter IV we outlined the disadvantages resulting from the use of a chronological record of events which contained both additions and deductions and mentioned the necessity of correcting each succeeding total to work out an error occurring in any previous portion of the work.

In accounting to prevent fraud, this feature becomes of value in connection with the Daily Cash Balance book for, in correcting an error, made either intentionally or otherwise, it would be necessary to correct not only the balances of a preceding report, if it contained the error, but also the opening balances of the current report, as well as both the opening and closing balances of all intermediate reports, or else give effect to entries in the Cash Book to adjust the error. In either case the neces-

sity of making the adjustment would tend to reduce the number of such errors.

Separate Books for Cash and Bank.

In the majority of businesses the cash receipts are greatly in excess of the number of cash payments, with the result that, as it is necessary to carry both the receipts and payments along together chronologically, the credit side of the page is seldom filled and the unused space is wasted. There are also very few cases where a like number of columns are required on each side of the book and additional waste results here.

In order to overcome this and also to provide for an increased number of operators it is often desirable to provide separate books for the Cash and the Bank.

In this case all receipts would be deposited in the bank and all payments would be made by check; therefore, but one column would be required to record the Cash Credits and, in the case of the Bank Record, only one column would be necessary for the Bank Debits. This would eliminate the necessity of devoting an entire side of a page for these entries as the extra column could, usually, be easily included on the same side, or, if the book would thereby become cumbersome, it could be folioed instead of paged and thereby be reduced in size, as both sides of the opened pages could be used for the same class of entries, Debits or Credits as the case may be, allowing but a small margin on one side or the other into which the columns for the contra-entries could be placed.

Check and Deposit Register.

Wherever the plan of carrying two separate books is used, it is customary to distinguish the one containing the Bank entries as a Check Register.

This book usually contains, in addition to the customary explanation columns, memorandum columns for Deposits and Balances and standard columns for Withdrawals as well as all those accounts that would have been provided for in the Cash Book under similar conditions. An Explanation Column should also be provided for Check numbers.

Questions for Written Work.

1. Contrast the daybook, journal and ledger method of bookkeeping with some more modern method. Describe the limitations of the first mentioned method and show to what extent, in what manner and for what reason it has been superseded or modified in modern accounting practice. (N. Y.)

2. Draft a form of cash book to be used where all receipts are deposited in bank and all payments are made by check. Illustrate the use of this book by three or more entries. (N. Y.)

3. Describe several methods of recording discounts on accounts as paid, avoiding misstatements of receipts and disbursements. State the advantages or disadvantages of the methods proposed. (N. Y.)

4. Prepare forms of Cash Books illustrating the use of Discount Columns, under the following conditions:

(a) Where it is desired to post the amount of cash received and the amount of the discount separate to the credit of the customer's account.

(b) Where but one posting, of the gross amount, is all that is required.

Compare the advantages of the two methods.

Make pro forma entries in each of the forms you have prepared.

Prepare a statement, from the figures you have used, illustrating the method of balancing the cash.

5. Prepare forms of Cash Books for use under the following conditions:

(a) Where Bank Columns are carried in the Cash Books but where, in balancing the Cash, the total Cash on hand is the difference between the totals of the Cash Received and the Cash Disbursed columns and includes the amount in the bank as well as that in the drawer.

(b) Where the entries relative to the Bank Account are kept in the Cash Book but where separate Ledger Accounts are kept for Cash and Bank.

(c) Where the total receipts are deposited daily and where all disbursements are made by checks, illustrating the use of a Check Register.

Make pro forma entries in each of the forms prepared and show by the aid of a Daily Balance Book the method of proving the Cash.

CHAPTER VII.

Accounts—Contents

In looking at accounts from the viewpoint of the record which they are intended to contain, we find that they may be divided into four classes: Major, Subsidiary, Summary and Collective.

Major.

A Major Account is one of the more important accounts in a set of books—one which contains, in some form or other, a record of all of the events that go to make up the narrative covering the transactions of a particular class.

Subsidiary.

A Subsidiary Account is one which is auxiliary to, though not necessarily dependent upon, nor essential to, some other account. They are used to contain certain items of a class either as a temporary account which may carry a more detailed record than the main account, or which may be made to adjust the major account as at the end of a fiscal period, and which will be closed into that account upon the expiration of the time which it was intended to cover, at the beginning of the new period, or as soon as it acquires sufficient magnitude to warrant its closing; or as a permanent account which will contain some portion of the main account that may have been set aside for some particular purpose and which will be in the nature of a "Rest."

It will be noted that these accounts may be either current, in the sense of being in the course of construction and relating to the present time, or may be Rest or Deposit Accounts awaiting future realization or disposition. The relation that a subsidiary account might bear to its Major Account also deserves mention.

Adjuncts.

If it is intended to contain some particular portion of the items that might go to make up the Major Account and is used for the purpose of relieving the Major Account of unnecessary detail or as a Rest Account awaiting the culmination of some event it will most likely appear on the same side of the Ledger, Debit or Credit, as the account whose items it contains, in which case it would be an adjunct to it.

Offset.

If, however, it represented items which, although properly belonging to the Major Account, had not been allowed to enter it on account of a tendency to disturb the value that it was desired to display, it would appear on the opposite side of the Ledger, in which case it would be an Offset to the Major Account and would appear as a deduction from the Major Account at any time it was used for statistical purposes.

The point of demarcation **between Major and Subsidiary** Accounts may not be very clear, for a number of accounts, although of Major importance may, in a sense, be subsidiary to some other account.

As an example, take the accounts representing Sales, Purchases, etc., these are properly classed as Major Accounts, still they are Subsidiary to the Trading Account; however, the Trading Account being of greater degree

than the Sales or Purchase Accounts hardly comes under the head "Major Account." It is more properly classed as a Summary Account.

Summary.

A Summary Account is one which contains in concrete form the substance of other accounts; a concise statement of facts. It is a summing up of the information contained in a number of other accounts to display some fact. It differs from the Major Account in that, although a Major Account may likewise have accounts that are Subsidiary to it, the items contained in the Subsidiary Account are of the same degree as the items contained in the Major Account while, in the case of the Summary Account, the items which it contains are of higher degree than the items which go to make up the accounts which are represented therein.

Collective.

Collective Accounts are those which gather a number of accounts together into an aggregation. Their function is to enable the one account to answer the purpose of many.

The distinguishing feature between a Summary and a Collective Account is that the one takes a number of accounts, each of a different class and by their aid displays some additional information; while the other takes items, which for the purpose they are to be used, are of the same class and simply combines them.

Contents of Accounts.

There is also another manner of classifying Accounts, viz., as to the correlation of the items—Mixed and Individual or Specific.

Specific.

A Specific Account is one which is precisely formulated and in which the items are of an exact, particular nature.

Mixed.

A Mixed Account is one in which the items therein are of a different or dissimilar nature. They are usually the result of a failure to carefully distinguish between the functions of two or more classes of items and of combining them, believing that they are similar. At best, Mixed Accounts are misleading and fallacious, and accountants should never allow them to exist. An accountant should work under the policy that if an account is worth keeping, it is worth keeping well and in all cases should see that account headings are specific and that separate accounts are provided for all dissimilar items.

An account may be Mixed or impure in that: (a) it contains items of two or more classes, as in the case of Merchandise, Interest and Discount, Freight and Express, etc.; (b) or items are contained therein which although of the same class are of different degree and would be used differently should the account be applied to some particular purpose or would perform different functions than other similar items contained in the same account, as in the case of Machinery Account, which might represent different classes of machinery, the depreciation on each class being different; or, (c) the account is disturbed by giving effect to certain elements which could more properly be set aside in some other account until some more opportune time, as in the case of Machinery, Plant, Equipment, Land and Buildings—accounts which are sometimes decreased on the books annually to give effect to depreciation when, in general, the asset should

remain on the books at cost and the depreciation should be cared for by the aid of an offset account; or, (d) the heading of the account is a misnomer as applied to the items contained in the account, as is often the case with "Goodwill", "Treasury Stock", etc., or, (e) one account has been used to contain items of a class which would later have to be apportioned over several departments, as in the case of Expense, Rent, Insurance, Heat, etc.

The rule, that account headings should be specific and that no account should be allowed to exist which did not have a definite, easily determined purpose in the books or which was so constructed that its function could not be ascertained except by an analysis of its contents, should be conscientiously followed.

Merchandise.

Reference to a standard business college text book discloses that the Merchandise Account is supposed to be debited with:

Inventory or stock of goods on hand at beginning of business.

Merchandise purchased.

Goods returned after being sold and credited to merchandise.

Shortage, Damage or Overcharge Claims allowed on goods previously sold.

Merchandise Discount.

Freight and Drayage, Storage, Insurance or other similar charges.

It is supposed to be credited with:

Merchandise sales.

Goods returned after having been charged to Merchandise Account.

Merchandise taken from stock for private use, donated or shipped on commission.

Shortage or Damage Claims on Purchases.

Merchandise Discounts.

Insurance received for goods damaged or destroyed.

Inventory at time of closing.

An analysis of the items entering into this account discloses at least a half dozen classes each of which could more properly be placed in some other account under a specific heading. As the account is given, it simply represents a conglomeration of figures from which no accurate information of any sort can be secured without an analysis of its component parts.

Even the profit, which it is supposed to display after the inclusion of the inventory, is not the actual Profit, either Gross or Net, on Sales or on Trading; therefore, the account can only result in a misconception of the outcome of the business and surely it should never be used by anyone who professes to be skilled in the art of accounting.

The component parts of Trading are Buying and Selling, therefore we should have accounts to show Purchases and Sales and, as there is usually a stock on hand at the beginning of any fiscal year and, also, as this stock does not pertain to either Purchases or Sales, we should have still another account headed "Inventory, Jan. 1, 19—" or some similar term, to care for this item.

These three elements, after giving effect to current inventories, outstanding invoices, etc., represent the outcome of Trading; therefore, to display the results of the efforts along that line we should close these accounts at the end of each period into one account and to properly distinguish this account, we should call it "Trading."

Interest and Discount.

The principal objection to the use of the account Interest and Discount lies in the lack of preciseness in Accounting terminology.

Interest is a charge made for the use of money. It is usually computed at a rate per cent. and may be collected either in advance or during the period of the loan. If collected in advance it is usually termed Discount.

So long as the use of the account is restricted to the above items and its use is understood to be so restricted, no harm can result for they are each of the same nature and in preparing a statement displaying the results of a business, would be used in the same manner and under the same headings or sub-headings; but suppose that Interest charged to equalize partners' investments or Cash Discount taken by customers for the prepayment of their bills, or Trade Discounts, in the nature of a reduction in price of articles sold to certain classes of the trade, were included. All of these items are of a different nature than those outlined above and, as the heading Interest and Discount applies equally well to these as to the others, we should eliminate the term from our nomenclature and in its stead substitute headings of a more specific nature; furthermore, as the net result of the Interest or Discount received and given is of minor importance and also as the controlling factors that lead to the granting or the taking of discount are somewhat different, we should distinguish carefully between the charges and the credits and should open separate accounts for each whenever necessary.

The most commonly used headings are:

Interest and Bank Discount, Dr.

Interest on Loans, Cr.

Interest on Bonds and Mortgages, Dr.

Cash Discount on Purchases, Cr.

Cash Discount on Sales, Dr.

Interest on Investment of Partners, Dr.

The item Trade Discount very seldom appears in the books as it is, in general, simply a reduction in the price of an article and is cared for in connection with the invoice on which it occurs.

Freight and Express.

The items going to make up this account might represent charges for:

Bringing stock to the establishment, an element of cost.

Delivering goods to customers, an element of sales.

Special expenditure made to procure certain goods in a short time; if they are in the nature of special goods, an element of sales; if they are regular stock that should have been on hand, an element of cost.

The use of such an account could only result in a misconception of the results obtained and, in its stead, such accounts as the following should be used:

Freight on Purchases, In Freight, Dr.

Freight on Sales, Out Freight, Cr.

Express on Sales, Dr. or Cr.

Express on Purchases, Dr.

Machinery or Equipment.

The analysis of a Machinery Account might disclose items representing:

Cost of Machinery and Equipment, including Tools, Boilers, Engines, Lathes, etc.

Repairs and Replacements, which might or might not increase the value of the Plant.

Deductions for Depreciation.

Deductions for articles sold, either at Selling price, Cost or Book value.

Cost of removing and setting up a machine in some other quarters, and Items of Expense.

In general, this account should only contain the items purchased, at cost price, including the expense of making ready for operations.

If the asset consists of items on which the rate of depreciation should vary, separate accounts should be carried for each class so that the depreciation could be computed without an analysis of the items or, if conditions were such that the additional accounts would be impractical, an Equipment Ledger could be installed which would contain the history of every article of equipment, including the Cost, Date of Purchase, Repairs, Depreciation, and eventually, the disposition of the asset, its selling price and the difference between the decreased value and the book value to close the account.

The Equipment Ledger could be balanced by adjusting it to correspond with its representative accounts in the General Ledger as explained in Chapter XX.

The Machinery Account should not be disturbed or reduced by the depreciation; instead an account headed "Reserve for Depreciation on Machinery" should be used to contain the allowances of this sort. (See Chapter XVII.)

Plant.

That which has been said about the Machinery Account applies with equal force to the Plant Account.

This account is usually used to show collectively the value of Machinery, Tools, Buildings, etc., in connection with the Plant.

It is at times used also to cover up the "Water" due to over-capitalization. Its use in this connection is to

be regretted and should be avoided on account of the misconception of affairs which it conveys.

Land and Buildings.

These items are also dis-similar in respect to the depreciation that occurs thereon and that which has been said about Machinery or Equipment also applies here.

Goodwill.

Goodwill represents the value of the connection or reputation which a business has acquired during its existence up to the time of its disposal. The account should never contain any items except those representing its actual purchase or sale price.

It is, like the Plant Account, sometimes erroneously or fraudulently used as a cloak for "Watered Stock," but it is more proper to use the term "Discount on Stock" and to frankly state conditions as they are. Its value should never be increased on the books except upon the acquisition of additional property, and then, only when the actual value of the thing given exceeds the tangible value of the thing received. If stock of the par value of $5,000,000.00 and with an actual value of $1,000,000.00 were exchanged for the assets of a going concern which had a tangible value of $800,000.00, the Goodwill would be $200,000.00, not $4,200,000.00 as is often stated. The additional $4,000,000.00 actually represents a discount on the stock and should be shown as such if it can possibly be arranged to do so.

The legal decisions on the subject seem to uphold the validity of exchanges of property for stock even though the intrinsic value of the one is undoubtedly much less than the par value of the other, therefore the plan outlined above, although desirable, is usually impossible and

the Goodwill or Plant account must be used to contain the "Water."

Treasury Stock.

Treasury Stock, like Goodwill, has been sadly misused in many cases to cover up the lack of stability of a number of corporations or to give an appearance of strength where but normal conditions prevailed.

It should only represent the par value of stock which has actually been disposed of by the company and which is later returned to it, either as a donation or on account of a forfeiture. The term could also be used in connection with stock actually purchased, but as it is, in general, illegal for a company to purchase its own stock, it is seldom used in this manner. If stock were purchased it would be treated as an investment and would appear in the books at cost with a memorandum as to its par value. The account should never be used to represent Unsubscribed Stock or Unissued Stock which has been reserved for future sale.

Expense.

The use of an Expense Account as a dumping ground for all classes of items is to be deplored and whenever possible separate accounts should be opened for every individual class of Expense. If conditions are such that items arise which cannot be properly charged to specific expense accounts, an account should be opened and headed "Expenses, unapportionable and unclassified" which would contain such items.

Rent, Insurance, Heat, etc.

These accounts, although the headings are sufficiently specific under ordinary conditions, require subdivision

wherever the business is large enough to have several departments.

Whenever it becomes necessary to subdivide the account, special care should be devoted to having the subhead analogous to the matter which the account is to contain. Such headings as the following are specific and proper:

Insurance, Material.
Insurance, Merchandise.
Insurance, Plant.
Rent, Store,
Rent, Office.

C. P. A. Questions

1. Define:

Cash Discount.

Trade Discount. (Ill.)

2. A corporation, located in Chicago, that has been very lax in its accounting methods, carries a freight account into which it charges all payments, of whatever nature, it makes to railroad companies; even payments made on the delivery of goods purchased F. O. B. Chicago. If called upon to reorganize their method what suggestions and alterations would you make in respect to this subject? State your reasons. (Ill.)

3. What is the Treasury Stock of a Corporation? (Ill.)

4. Define Goodwill. On what basis should Goodwill be valued? On what grounds, if any, can an increase in the book value of Goodwill be justified? (Wash.)

5. Would an account "Investments and Treasury Stock" be proper? Why? (XXX.)

6. Is it proper to charge the difference in the value of a business, excluding Goodwill, and the purchase price in stock, to Goodwill account? (XXX.)

7. By analysis, the debit side of merchandise account shows purchases, $60,000; returns to us, $4,000; entries offsetting errors in sale extensions, $2,000; trade discounts to customers, $13,500; balance profit, $27,000; the credit side shows sales, $90,000; returns by us, $5,000; allowances to us, $1,500; inventory at close of year, $10,000. Suggest such changes in the method of recording the foregoing statement as would readily show (a) net amount

of purchases, (b) net amount of sales, (c) percentage of profit.

8. A company has acquired at $90.00 per share, 100 shares of its own capital stock of the par value of $100 per share. Its Balance Sheet shows Treasury Stock $9,000. Is this correct? If so, why? If not, state how you would adjust the books. (N. Y.)

CHAPTER VIII.

Individual or Specific Accounts

The accountant should endeavor to use headings for accounts which can only be interpreted in one manner and which are so precisely formulated that only such entries as properly belong therein could possibly be included in the account. He should avoid ambiguity and the use of terms or names whose meanings have become distorted or perverted in the public mind. Cases do arise, however, where, owing to the inability to supply a better or more accurate term, it becomes necessary to use the one which has been generally accepted, even though that one may be interpreted in other ways than the items making up the account would warrant. In such cases, the general term should be modified or restricted in some way so that the proper value of the account will be apparent; or, if conditions are such that it is not practicable to restrict or modify the account in the books or in the Balance Sheet, special mention could be made of the account in the accountant's report setting forth the exact meaning of the term as used.

The tendency of modern accounting is toward the evolving of new and specific accounts to take the place of such accounts as we have classed as Mixed Accounts. The result is an account for every class of value or every element of business effort which is a factor in recording its growth or decline.

The majority of these have been mentioned in the preceding chapter so it will be necessary to now mention only a few of those which possess special features.

Purchases.

The Purchase Account should contain only those items which have been purchased for resale, with such credits as may be necessary through the return of goods purchased or on account of allowances in the nature of trade discounts, damages, overcharges, etc. The balance of this account should represent the net cost, exclusive of Cash Discount, of the goods purchased.

At balancing time, care should be taken to see that post dated invoices are given effect if the goods have been included in the inventory.

In-Freight, although often included in this account, should be shown separately; first, to keep the account pure; secondly, on account of the value of the In-Freight account should it become necessary to apportion the amount of freight paid over the goods sold and the inventory.

The Purchase Account could be divided into several accounts, such as: Purchases, Raw Material; Purchases, Merchandise; Purchases, Grain; Purchases, Flour, etc., if it were desired to segregate and record the transactions of Manufacturing establishments that also deal in other goods or of Trading concerns operating various departments.

Sales.

This account should include all sales of stock which were purchased with a view of such disposition, as well as such deductions as overcharges, returns, etc.

The balance of this account should represent the net sales of the concern for the period which the account covers.

Sales of fixtures or other similar property, which at the time of purchase were not intended to be dealt in and which were not charged to Purchase Account, should

not be included in this account; neither should Sales on Approval, Consignments or Ventures, nor actual sales where the goods are in the process of manufacture but not yet delivered, even though, as was the case disclosed by a recent audit, actually paid for before the specifications of the order had been decided upon.

Wherever, owing to the small number of Consignment Sales that occur or for some other cause, it is deemed desirable to include such transactions in the Sales Account instead of opening another account, adjustments should be made, at balancing time, to correct the account. It is believed better, however, to keep the account pure from the start so that there will be no possible chance of overlooking these items or of giving incorrect information.

Allowances for damaged goods due to contingencies and not in the ordinary run of business, should be shown separately, if they run into any considerable sum, on account of the tendency to disturb the percentage of profit on the goods sold,—the profit on turnover as it is called.

Gross Profit.

In certain lines of business, such as Real Estate or Jewelry, it is found advisable to separate the sales account into two sections; one representing the cost of the articles sold and the other the profit on the individual transactions. This gives rise to the account "Gross Profit."

In order to accomplish this analysis of Sales, each article or tract is designated by a number which acts as an index to some record of the purchase of the property. By reference to the number and later to the record of cost, the cost is ascertained and the selling price can be apportioned over Cost and Gross Profit.

The apportionment necessitates two columns in any

book of original entry into which such sales are to be recorded instead of one as is used where sales are not so treated.

Inventory.

The Inventory Account should be charged with the cost of all stock at any particular balancing period, which has been purchased with a view of re-selling.

A separate account should be opened for each inventory; the heading designating which one it represents, as "Inventory, June 30th, 1913."

At the end of each fiscal period or at any time it is intended to verify the profits of an undertaking, an inventory of the stock is taken and the amount thereof is credited to an account headed "Trading." The inventory account, representing the stock on hand at the beginning of the period, is closed into Trading Account also, as well as the Purchase Account and such other accounts as represent a portion of the cost of the goods sold. The Trading Account then shows the actual cost of the goods turned over.

It will be seen that, immediately after the inventory account representing the stock at the beginning of a period is closed into Trading Account, another inventory account representing the stock on hand at the end of the period and likewise the beginning of the next period will take its place so that at all times the books will contain an account or accounts to represent the stock at the beginning of the period of operation.

Where the old style Merchandise Account is used, the inventory is taken to adjust that account and the balance of the account represents the Profit or Loss; where the Trading Account is used the inventory is taken to ascertain the actual cost of the goods sold—the value of

the goods turned over; the difference between the cost of the goods turned over and the selling price represents the Gross Profit.

Valuing Stock.

As previously stated, the Inventory Account should be charged with the cost of the goods purchased for resale. Special care should be taken to see that all goods represented by invoices charged to Purchase Account are inventoried, whether they are actually in stock, either at the principal office or in branches, or are in transit, and, also, that the cost of all goods sent out on consignment as well as an allowance for freight on the stock on hand is considered.

Often the latter item is not considered, and the entire amount of transportation paid is charged to the current period, but where the item assumes very large proportions, as it does in the West, owing to the lack of transportation facilities and the distance from the base of supplies, it is undoubtedly better to consider it as an increase in the value of the stock, although in general, it is placed in a separate account. Care should be taken, however, to see that only such charges as actually enhance the value are included; that is, removing stock from one store to another should not be considered, unless like goods would actually cost more to deliver at the second store if shipped direct from the base of supplies.

If, owing to a fluctuation in the value of stock, it could be purchased at a lesser price than was actually paid for it or contracted to be paid for it, viz., if the market price is less than the cost price, or the contract price where the goods have not been delivered, it is considered by some accountants proper to inventory the goods at the market price instead of the cost; their rule being

that an inventory should be taken at cost or market, whichever is lower. This is hardly proper, for the Gross Profit on a transaction represents the difference between the actual cost and the selling price irrespective of market price, and any method of ascertaining the Gross Profit, except by considering actual cost and selling price, must be inaccurate. If, however, the market price is such that a loss will eventually result on the sale, a portion of the profits of one year should be reserved to protect the next year against this anticipated loss.

In the case of the sale of an undertaking or upon the dissolution of a partnership, or in fact, any case where an inventory is taken except with a view of ascertaining profits, the cost price need not, necessarily, be used; but if the object of the inventory is to ascertain profits no other method of valuation can be considered proper.

Where an inventory is being taken to ascertain the asset value of the stock as well as the profit on an undertaking, it should be valued both as to market and as to cost. The cost value to be used in the Trading Account and the asset value in the Balance Sheet, the difference in the two values to be adjusted by the aid of a Reserve Account.

In cases where the stock on hand represents a number of purchases at different prices and a considerable amount is involved, it is not proper to consider the last price paid as the proper price for inventory purposes, lest, owing to some small, probably intentional, purchase at a high figure, the actual inventory value and likewise the profits be greatly increased.

It is considered proper to base the inventory valuation on the last few purchases, viz., presuming there were 1,000 articles on hand and the last purchases were as follows:

Nov. 1st	400@$10.00
Dec. 1st	400@$ 9.00
Dec. 20th	400@$ 9.50

the stock would be apportioned by assuming that all of the last two purchases were on hand and that the balance of 200 articles remained of the Nov. 1st purchase; therefore, the inventory would show 200@$10.00; 400@ $9.00 and 400@$9.50.

Often, owing to a fire, or for some other reason, it is either impossible or impracticable to inventory the stock, but for financial reasons, an estimate of its value may be desired. This can be secured if the inventory of some previous date is at hand and if the Purchase, Sales and Percentage of Gross Profit on Turnover, to date, is known.

The Sales Account contains the cost of the goods, as well as the gross profit, hence by dividing the amount of the sales by the percentage of gross profit plus 100% to represent the cost of the goods sold, one per cent of the cost of the goods sold will be secured. This amount multiplied by 100 will equal the cost of the goods sold. The original inventory plus the purchases less the cost of goods sold will represent the value of stock on hand.

In the ordinary trading concern, one inventory includes the entire stock, but in the case of a manufacturing concern or a trading concern handling various classes of goods, there are usually a number of departments and a separate inventory is taken for each.

In the case of a manufactory, the inventories would probably be of Raw Material, Partly Finished Goods, Finished Goods and, in some cases, Merchandise Purchased. Inventory accounts should be operated for each of these divisions.

Raw Material.

The inventory of raw material should include everything which, during manufacture, enters into the finished product but which has not been changed in form or value by the manufacturer. It should not include engine room supplies, tools or repair parts, etc., neither should it include articles which enter into the finished product without additional manufacture, such as completed parts, etc. These should be inventoried separately as Partly Manufactured Goods.

The inventory value of raw material should include, in addition to original cost, duty and infreight, although separate accounts could be used to contain the freight or duty pertaining to the goods on hand.

Partly Manufactured Goods.

The inventory of Partly Manufactured Goods should include all articles in the process of manufacture. The value should be at actual cost of raw material or parts, including duty and in-freight, plus labor and a portion of the overhead expense or on-cost.

If the inventory is prepared for a concern operated by a Holding Company, and if a portion of the goods inventoried are received from some of its subsidiary companies, it is considered proper to inventory the goods at selling price to the purchasing company, but the holding company should set aside a portion of its profits to cover this increase in value through the transfer from one department of its organization to another. The first company would, undoubtedly, be entitled to its profit on the sale to the other company, likewise the purchasing company should pay the market value for the articles transferred, but the holding company could hardly assume a profit on the simple transfer.

Where goods are in the process of manufacture and are to be sold at a price which will result in a loss, the loss should be anticipated and given effect in the current year's business.

On exceptionally large contracts where, were the entire profits to be given to the year in which delivery is to be made, the result would be an excessive dividend in that year as against a very small dividend in the preceding year, and where the contract is sufficiently well along that the outside limit of cost to complete can be ascertained with a considerable degree of accuracy, and where the contract will undoubtedly result in a profit, it is considered proper to apportion the estimated profit over the two years on the basis of the amount expended to date and cost to complete, to completed cost.

Finished Goods.

Inventories for Finished Goods should be on the same lines as outlined for Partly Finished Goods, viz., Cost should control. No estimated profit should be considered, and any losses, due to unfavorable contracts or conditions, should be anticipated and cared for.

In the case of partnership adjustments, it is, at times, considered proper to assume a profit on manufactured goods but this should be accomplished without disturbing the inventory valuation at cost.

Royalties on patents, capitalized on the theory that the cost of the goods would be increased if the patent were not the property of the concern and if it were necessary to pay the royalty to others, would hardly be included in the cost of the goods; in fact it seems improper to make such an allowance.

In general, the cost of a patent is spread over the period of its anticipated active life by a like charge

against each year; if desired, however, and if the approximate quantity of product that it will affect can be ascertained, it may be spread over the product per unit of production. In any case the total amount charged to Revenue should not exceed the actual cost of the patent and no profits should be assumed in advance of actual sales on account of its possession.

Obsolete, uncatalogued or deteriorated goods should be inventoried at cost price with the other goods, but a sum representing the probable loss on this class of stock should be reserved to protect the succeeding year against the loss should it occur.

In making the estimate of the proper amount to set aside to cover the loss, care should be taken to see that the amount is based on an actual appraisal of the goods and not on an arbitrary percentage basis which may or may not be approximately correct.

C. P. A. Questions

1. Define Turnover.

2. Describe the Merchandise Account as it is generally kept. Show how it may be subdivided, and the advantages, if any, of such subdivision. (Wash.)

3. Purchases, Sales, Returns, and Allowances are frequently posted to one account called Merchandise. Describe the limitations of an account so kept, and suggest, with your reasons therefor, an improved method of recording these transactions. (Mass.)

4. How should inventories be treated in closing the ledger at the end of a fiscal period? Is the common practice of adding the inventory of goods on hand to the credit side of the merchandise account theoretically correct? Explain. (N. Y.)

5. Acting as auditor of a manufacturing company, state briefly the essential points to be considered in ascertaining the correct profits so far as inventories are concerned.

6. A manufacturing concern finds that in the past fiscal year the prime or manufacturing cost was thirty-four per cent of the profit on sales. On June 30 of the current period the directors want an approximate inventory without count or schedule and call upon you to prepare it. Illustrate your plan of procedure—(150-200 words). (Ill.)

7. Admitting that, in making up an inventory, the most approved method is to value the goods at cost price, can you state any instance where it would be permissible to extend the values at the market price? (Ill.)

8. Describe three methods of ascertaining and recording the profit or loss on Sales. (XXX.)

9. A firm having several branches maintains an account with each branch in the Ledger and charges to such account all goods sent to the agents for stock. When stock is taken the balance of each branch is treated as ordinary Accounts Receivable and is included in the General Debts owing the firm. If you see any objections to this method, state them, and say how you would deal with the accounts. (Ill.)

10. The East and West Railroad Company hauled many tons of coal during the year to the various distributing points along its line for the use of the locomotives, and upon this company coal $70,000 freight was charged, such charge being made against the cost of fuel for locomotives and credited to freight earnings. Was the above method of handling this freight item correct? In answering state your reasons fully. (N. Y.)

11. A trading and mining company maintains five general stores at five separate stations, and concentrates its supplies each year at Station A, which is the only one accessible by railway; distribution is made from thence by means of wagon and pack trains. The cost of goods laid down at Station A is 10% above invoice prices at the company's general office in Montana; and the agent at Station A is instructed to re-bill all shipments to Station B at 20% above original invoice cost; to Station C at 35%; to Station D at 40%, and to Station E at 50%, the experience of several years bearing out the General Manager's statement that such additions are approximately correct and cover actual cost of transportation.

In auditing the accounts for the purpose of certifying the annual balance sheet, you ascertain that certain

goods at Station D amounting to $10,000, are inventoried by the agent at that point at 70% above the orginal invoices which you have examined at the home office. He states that Station E, being overstocked, shipped him several lots of merchandise at price billed out to E by Station A, plus 10% for estimated cost of handling and repacking at E; and to this D legitimately added 10% for cost of transportation from E back to D.

In your visit to other stations you find many similar instances where goods have been moved back and forth and each time the shipping station has added 10% for handling and repacking.

Out of a total inventory, at all stations, of goods originally costing $200,000, the summary shows final extensions of values aggregating $325,000, of which not more than $75,000 is covered by cost of transportation, leaving $55,000 represented by internal charges added between the different stations.

Review the foregoing statement and give your method of handling such accounts. (Ill.)

12. In the course of trading, you make and receive certain charges or allowances for purchased or sold returned goods. How would you deal with these? (Penn.)

13. A manufacturing concern is required to carry a six months' supply of a certain kind of raw material and, as the material is not of the kind that can be purchased every day, they must purchase it at any time it is offered to them. For this reason the prices fluctuate sometimes very considerably. When they purchase this material, they pay cash for same and have the material shipped in as wanted. What method would you use in arriving at the cost of this raw material used during any one month in manufacturing? (Penn.)

14. You find that a concern whose books you are auditing has capitalized the amount of royalties that it would have had to pay on the sales of a three years' period if it had not owned the patents. On the increase of surplus thus obtained the directors have declared a stock dividend. Would you consider yourself called on to criticize the action of the directors? If so, what would be the character of your criticism? (N. Y.)

15. A construction company contracts to erect buildings or works, charging in some instances a fixed price, and in other instances the actual cost plus a fixed percentage thereon. In what manner should the unfinished contracts be valued at the close of each fiscal year? (Adapted from N. Y.)

16. What should be the procedure in ascertaining the value of stock on hand at the time of a fire; the financial books being intact and showing an inventory taken four months before the fire? It is also possible to ascertain the Sales and the usual Gross Profit. Without using figures draft a statement in the form you would consider most suitable for setting forth your findings. (Adapted from Wash.)

CHAPTER IX.

Cash

The Cash account should contain a record of all cash entering or leaving a business. The balance of this account should represent the actual cash on hand, available in the liquidation of liabilities. Such items as Certificates of Deposit, I. O. U.'s, Dishonored Checks, or any other items that are not actual cash or immediately convertible into cash should not be included in the balance.

Statements of Receipts and Disbursements.

A Statement of Receipts and Payments or Disbursements differs from a Cash Account only in that the beginning and ending balances are omitted.

If it is desired at any time to combine a Statement of Receipts and Disbursements with a Cash account, it can be accomplished by arranging two sets of columns, one for the Receipts and Disbursements items and the other for the Cash Balances and the totals from the Receipts and Disbursements columns.

Statement of Revenue and Expenses.
Statement of Income and Expenditures.

A Statement of Income and Expenditures should contain all items of income or expense, earned or incurred, whether or not they have resulted in an actual increase or decrease of Cash. In general, the term is used by societies, municipalities or similar institutions, not organized for profit, and is intended to take the place of the Profit and Loss account of a business organization.

The principal difference between a Statement of Receipts and Disbursements and a Statement of Income and Expenditures lies in that the former may contain Capital items, or Income items which refer to some period not covered by the latter and that the latter may include items which have not yet been realized or paid. The only condition under which they would both be the same would be where there are no Capital items included in the Cash account and where all items of income have been actually paid or realized in cash. At the winding up of an organization such statements could, possibly, be prepared to contain the same items, provided that it was a non-capital organization; otherwise these statements could not agree.

Certificates of Deposit.

A certificate of deposit represents actual cash deposited with a bank or bankers, either on account of the income it produces or for safety where a checking account is not desired. In either case it should not be included in the cash balance but should be placed in an account headed "Certificate of Deposit, maturing........................, 19........" The income it produces should not be confused with the income derived from operations and, therefore, should also be shown separately or with other like items in the books.

Trust Funds.

The legal liability of a trustee is greatly increased where the trust fund is not kept separate from the trustee's own funds for, no matter how careful he might be or how profitable an investment might become, he could not profit in any way; whereas, should a loss result under these conditions, even though he was not responsible for it and had acted in the best of faith, he

would have to reimburse the estate to the amount of the loss.

If the trust funds are specifically invested or are deposited separately from his own, he is only responsible for *mala fides* acts and, for this reason, trust funds should always be separated from the cash of the trustee. If possible they should be deposited to a separate account in a bank of good repute and should be designated "Estate of Jane Doe, Peter Smith, Trustee," or some similar term, specifying that the account is that of the estate to distinguish it from the account of the trustee.

I. O. U.'s.

I. O. U.'s and tickets of managers and other employees form one of the hardest problems of the bookkeeper's work. The managers usually feel that they are privileged to help themselves to the cash, often without making a memorandum of the amount taken, and other employees easily acquire the habit of overdrawing between pay days, if the opportunity is offered. Everything possible should be done to discourage the practice. In the case of minor employees, one of the best plans is to demand that they interview the manager and have him vise the ticket before making the advance. In the case of the manager, it is probably better to open an account to which all I. O. U.'s are charged and then credit it with his salary when it becomes due, making a check to cover the difference in his favor, if there is any, at that time. The tickets should be retained until the end of the period and then be given him with the check to balance his salary account.

C. P. A. Questions

1. Distinguish between Revenue and Expenditure Account and Receipts and Disbursements Account. State fully the difference. (N. Y.)

2. State fully, reasons for or against the use of Cash Receipts and Payments on account of trading, as a basis for imposition of a tax on corporate incomes. (N. Y.)

3. Discuss the underlying principles which create a distinction between a statement of "Receipts and Disbursements" and "Revenue and Expenses." Why are the books of most municipalities based upon Receipts and Disbursements instead of Revenue and Expenses? (Adapted from Ill.)

4. Under what conditions would the Receipts and Revenues and the Disbursements and Expenses be alike? (Adapted from N. Y.)

CHAPTER X.

Capital and Revenue.

It is believed advisable, before taking up the study of the various property accounts, to discuss the underlying principles involved in distinguishing between Capital and Revenue Income and Expenditures.

Capital Receipts—More Properly Capital Income.

Capital Income is that amount contributed to or secured for permanent use by an organization to enable it to carry on its business.

Capital Expenditures.

Capital Expenditures are those expenditures made in acquiring, improving or extending the equipment of an organization.

Working Capital.

The Working Capital of an organization is the amount of the Capital Income remaining after caring for the Capital Expenditures.

Fixed or Capital Assets.

Fixed Assets are those assets, acquired by Capital Expenditures, which are intended to remain in the business for its use.

Current Assets.
Floating Assets.

Current or Floating Assets are those assets, acquired by the expenditure of Working Capital, which are not a portion of the permanent investment of the undertaking.

Fixed Liabilities.

Fixed Liabilities represent that portion of the Capital Income of an organization which is a liability of the concern as distinguished from the investment in the organization.

Current Liabilities.
Floating Liabilities.

Current or Floating Liabilities are liabilities which require attention within a short time, viz., liabilities which are not of a permanent character.

Revenue Receipts—More Properly Revenue Income.

Revenue Income is that which properly arises from the operation of an undertaking.

Revenue Expenditures.

Revenue Expenditures are those incurred in the operation, or maintenance of an undertaking.

Capital and Revenue.

In determining what properly constitutes an increase in the Capital Assets of an organization, it is necessary to ascertain the purpose and effect of the expenditure.

An expenditure made by an undertaking with a view of increasing or extending its operations or in preparing it for operation is a charge to Capital; all others are a charge to Revenue and reduce the profit of the organization.

In preparing a concern for operation, it is presumed that all expenses incidental to its organization or the sale of its stock or bonds, or in fact, every expenditure of every nature up to the time the property is ready to operate, are proper charges to Capital.

Charges for increasing or extending the operations of a concern may properly include any charge made for new equipment which is to be used in addition to all other equipment; or for new equipment which is to be used in place of some old equipment, in which case the book value of the old equipment is eliminated from the Capital Assets and the cost price of the new is substituted; or for the residual value of old equipment which has been converted into use again.

Capital Assets should be reduced on the books of a concern at any time that a portion of the assets are disposed of and also from year to year to provide for depreciation. The amount written off at the time of sale should represent the book value of the asset, viz., the purchase price less deductions already made or allowed for depreciation. The difference between this sum and the Selling Price should be adjusted through the Undivided Profits or Surplus account as affecting prior years. The amount allowed for depreciation from year to year should represent the decrease in value of the asset due to wear and tear, obsolescence and effluxion of time. It is in the nature of a rental charge, paid by the business for the use of the Fixed Assets, and is properly a charge against Revenue.

A fluctuation in the value of the Fixed Asset does not increase the rental value of the asset to the business; therefore, as the concern does not intend to dispose of the Fixed Asset and as it is only intended for the use of the business, no attention need be paid to the fluctuation.

A fluctuation in the value of a Current or Circulating Asset, which has, manifestly, been acquired for the purpose of realization, has a direct bearing on the profit to result from its sale and, where a loss is probable, should be taken into consideration and the anticipated loss given

effect; but, where the fluctuation is favorable, it is deemed better to await the time of sale before taking credit for the profit.

Increases or decreases to Capital may also occur in the case of reversions, viz., where property or a particular sum of money is to fall to its owners at the expiration of a particular time and where the income that that person or persons derive is a sum different from the true income of the property.

This principle applies in the case of leaseholds which have a rental value different from the amount actually received, but which will, at the expiration of the present lease, revert to the owner, who will then secure the greater or lesser sum, as the case may be, with the consequent change in value.

The Revenue account is properly charged with every expenditure incurred in the operation of the business. It should also be charged for the use of the Fixed Assets necessary to the operation of the business and for all stores consumed as well as with all repairs or renewals.

In general, every item representing an expenditure which does not actually enlarge the field of operations, improve the fixed assets or increase the anticipated earnings of the concern, should be charged to Revenue.

Although, prior to the beginning of operations, it is considered proper to include commission on sale of stock, legal expenses, rent, interest, etc., in capital, it is, in no case, proper to so handle these items after operation has once begun, unless the expense is incurred in connection with the acquisition of additional Capital Assets.

It is not to be presumed that Revenue Expenditures only include those which do not represent assets, but rather that, although it includes all expense items, it also includes the expenditures made for assets which are

to be immediately consumed in the business and which are of such a nature that it is not considered advisable to record the amount consumed from day to day.

Mine Quarries, etc.

The principles outlined above do not apply, in practice, to mines, quarries, and similar undertakings which are intended to operate only so long as the asset exists. Such organizations do not provide for the reducing value of the asset from year to year for, in general, it is not possible to replace it, neither is it possible to ascertain the residual value and, furthermore, it is not considered desirable to retain in the business large sums of money which it is not intended to re-invest.

In such organizations, the investment and all additional expenditures made in developing, promoting or financing the concern are considered as capital and all receipts of whatever nature, except such as may be necessary to maintain the equipment of the mine, are considered as revenue.

Companies intending to purchase other properties and to continue operations indefinitely should provide for depreciation and exhaustion of properties.

C. P. A. Questions

1. What constitutes Capital Expenditures? (Cal.)

2. State the general principles covering the discrimination between what constitutes proper charges against capital and what constitutes proper charges against revenue.

3. Name and define two classes of receipts (income) and two classes of expenditures. (R. I.)

4. Under what conditions would amounts be charged to betterments at one time, and charged to operating expenses at a later date in railroad, electric and gas companies? (Penn.)

5. Point out carefully and illustrate with examples the distinction that is drawn between circulating and fixed capital. How far is this distinction of importance? (Penn.)

6. What effect, if any, has the depreciation of fixed assets on the loss and gain account? Explain fully. (Penn.)

7. Define your understanding of the principles involved in determining what are and what are not expenditures upon Capital. (Ill.)

8. Distinguish between depreciation and the fluctuation of assets. (XXX.)

9. Do Revenue Expenditures create assets? (XXX.)

10. Distinguish between Revenue Expenditures and Capital Expenditures. (XXX.)

11. Where and in what manner of entry should record be made of sales of plant and items of machinery disposed of because worn out or otherwise useless? (N. Y.)

CHAPTER XI.

Investments

A separate account should be opened for each investment made. If it is an investment of funds which have been reserved for some specific purpose, as in the case of a Sinking Fund Investment or Reserve Fund Investment, to provide for Contingencies, special mention should be made of the fact. In the case of bonds or other interest bearing securities, it is desirable to mention the date of their maturity as well as the rate of interest they bear and the dates of payment and, in the case of stock, to show the dividend dates.

Accounts should be maintained to care for the income of the investments either entirely separate from the investment account or by preparing an extra set of columns, debit and credit, under the same heading, forming a combined account as outlined in Chapter IV.

Investments in Real Estate.

The treatment of an account representing Real Estate held as an investment differs considerably from that representing the acquisition of property for the use of the concern. In the latter case no fluctuation in the value of the property need be considered so long as the property answers the purpose of the business; whereas, in the case of an investment, an unfavorable fluctuation due to a change in transportation facilities, market conditions, etc., should be given effect if there is a possibility of it ultimately resulting in a loss. The treatment of Real Estate held as an investment is much the same as that of stock or other similar assets in that no profit should

be taken until the property has actually been disposed of and that all losses should be anticipated and given effect to protect the year in which the ultimate sale occurs against the year in which the loss arises.

There is also another principle which requires consideration in connection with the Real Estate held as an investment and that is the distinguishment between Capital and Revenue Expenditures. Assessments for improvements or improvements made directly by the owner undoubtedly increase the value of the property and may correctly be added to the Investment Account; but taxes do not increase the value of the property and, in the case of producing property, should be paid out of the revenue they produce, the balance of the revenue, if the asset is held as an investment, being a credit to Net Profits Account. If, however, the asset may be classed as non-producing, in that it produces no revenue or not sufficient to pay the taxes and necessary expenses incidental thereto, it is proper to increase the amount of the investment by the amount which the expenses exceed the income. This assertion is based on the theory that any expense properly chargeable to the period of construction or during the time an asset is being brought up to a producing stage is properly chargeable to Capital. The theory is applied to mines in distinguishing between development work and operation; to railroads to distinguish between construction and operation and to non-producing real estate, as stated above.

Investments in Stocks.

An investment in the stock of other companies may be made either to secure the control of the other organization or on account of the revenue it produces. If the investment is to secure the control of the subsidiary com-

pany the stock should be entered on the books of the holding company at its book value and any difference between the purchase price and its book value should be set aside in a subsidiary account until such time as the stock is disposed of. The reason for placing it on the books at the book value is to facilitate the consolidation of the balance sheets of the respective companies, and the separation of the earned surplus from the purchased surplus. This is accomplished by combining the figures of all the balance sheets after eliminating or adjusting inter-company transactions. If the stock in the holding company's balance sheet appears at the same value as it does in the books of the subsidiary company, it is only necessary to offset the one against the other. Any difference in the book value after making due allowance for that portion owned by other stockholders, will represent the profit or loss on the investment.

The holding company has not purchased the stock of the subsidiary company with a view of re-selling it, and it is in the nature of a permanent investment, therefore no effect need be given unfavorable fluctuations in the market value of the stock, neither should a profit be assumed on account of a favorable fluctuation.

If the stock has been purchased, only for the revenue it produces, it should be valued as other assets in which the firm deals, as outlined in Chapter VIII.

If the stock represents the investment in some mining company or similar concern operating a wasting asset which is not maintained by reserves, the dividends received will comprise a portion of the investment that is being returned as well as the actual profit on the investment. It is impossible to determine, accurately, just what portion of profit or of capital the dividends contain and it is also manifestly impossible for the dividend to con-

tinue to be paid indefinitely, therefore some provision must be made which will reduce the asset value of the investment on the books to almost extinction before the mine or other property is exhausted.

The rule of reducing the book value to the market value whenever the market value becomes the lower would hardly provide sufficiently or properly for the wasting of the asset, as, so long as the property produced, the amount of the dividend would be the criterion of value, rather than the possibility of exhaustion; therefore, some other plan must be used to care for the reducing value of the investment.

Whatever plan is used, it should be one which will not actually extinguish the asset from the books, lest it entirely disappear and its earnings be misappropriated. The plan of writing off an amount each year equal to the net receipts, after allowing a fair rate of interest as revenue, is to be recommended. Of course, after the asset is reduced to a nominal sum, no further provision need be made for exhaustion and the entire dividend may be treated as revenue.

Investments in Bonds.

An investment in bonds differs from an investment in stock to the extent that, with the former, it is generally possible to ascertain the date at which it will mature, the actual amount to be received as interest, the amount the investment will yield as income and the rate of the yield.

This is not true of stocks, therefore that which has been said relative to investments in stocks will not apply.

In the case of bonds, the purchase price is rarely par, although, in general, they are payable at par, therefore the purchase price must be increased or decreased on the

books from period to period so that its resultant balance will equal the face of the bond at the time it matures.

If a bond was purchased at a sum above par and if the account remained on the books during the entire life of the bond without change, when the bond was paid, it would produce a considerably smaller sum than the book value and a loss would result which would have to be adjusted in that particular year; inversely, if it had been purchased considerably below par, a considerable profit would have resulted.

It is, therefore, self evident that any income produced by a bond which was purchased above par, should be applied first to the amortization of the premium paid, then the balance of the income may be considered as revenue. If the bond had been purchased below par, its approaching maturity and the possibility of collecting par increases the value of the bond and the account should, in the absence of statutory regulations, be increased by the amount of the accumulation.

In ascertaining the amount by which a bond account should be increased or decreased on the books each year, reference should be had to some Bond Table, copies of which can be secured at any book store.

In many cases, the bond accounts are adjusted each year by using the market quotation as the basis of valuation. This plan is incorrect in that, at the time a bond is purchased, the purchase price is based on some predetermined ratio of yield and any basis of valuation which does not give effect to this ratio of yield, subject to contingencies, must improperly state the income on the investment unless, of course, the bond does not represent a permanent investment.

Bonds purchased for immediate resale could properly

be valued at cost less an allowance for an unfavorable fluctuation, the same as other items dealt in.

Many classes of bonds are issued with the intention of refunding them if it is impossible to care for them at maturity. In any case, it is very seldom that the higher grade of bonds are foreclosed, therefore it seems unnecessary to provide for loss through their non-payment, particularly so, if the bonds have a long time to run; but bonds of the speculative class are of uncertain value and the investor should not be too hasty in accepting his interest or his stock bonus as profit. The possibility of a loss resulting through an unsatisfactory refunding agreement or through foreclosure may be provided for by reserves if desired.

Investments in Securities, In General.

Where investments are made in securities from funds which have been reserved for some specific purpose, it seems unnecessary to provide for a minor loss that might occur at the time of their sale, for in no case would the loss affect the operation of the business and it would simply mean that instead of having a particular sum in reserve the amount might be slightly reduced at the time of realization. Of course if the loss was so great that the balance sheet would result in a mis-statement or that the result to be obtained by the reserve was defeated, it should be given effect and both the reserve and the investment accounts should be reduced to a more proper amount.

Where a considerable number of securities are held by a concern dealing in securities, it is possible that certain of them have decreased in value while others have increased, in which case, instead of entirely ignoring any increase due to a fluctuation in the market value, it is

considered proper to allow the increases to offset the decreases; but where a loss will undoubtedly occur, an amount is credited to an Investment Fluctuation Account and charged against the income of the current year to provide for the loss should it eventually occur.

Consideration should be given the possibility of securing a favorable market quotation by the aid of "Accommodation Transactions" between members of a group of investors and of using this favorable quotation as a basis of an overvaluation on some particular investment and a consequent covering of losses.

In the case of a firm holding securities other than as a dealer in them, no charge could be made against Income from Operations to provide for the loss, for this would refer to the investor's business as a trader or manufacturer instead of as an investor. Any adjustments would have to be made from the Net Profits Account direct.

C. P. A. Questions

1. You find in your annual audit of an Investment Co. that bonds of another company are included amongst the assets at their face value, though purchased at a discount; that such discount has been considered as commission earned and so credited to Profit and Loss Account and later carried to a Reserve Fund. What is your opinion of the transaction? If it does not meet with your approval, how would you have recorded the transaction? (Adapted from D. A. A.)

2. Describe the various methods which you have met with for writing off the premium on bonds purchased, pointing out their weaknesses or advantages. What is the most scientific method of dealing with premiums paid and upon what principle is it based? (Ill.)

3. A corporation owns three parcels of real estate, one unimproved which produces no income; one partly improved which produces just sufficient to provide for the taxes, and the third fully improved which produces a considerable sum in addition to the taxes and other expenses. How should the accounts appear on the books? (Wash.)

4. A corporation formed to invest in certain classes of securities has made a serious loss on paper by the fall in the price of some of its purchases, while it has earned enough on income to pay the usual dividend. How should this be dealt with in the annual accounts? (Ill.)

5. Finance corporations holding a large number of shares in other corporations are in the habit of valuing their securities for Balance Sheet purposes at either (a)

cost price, or (b) market price at the date of the Balance Sheet.

Discuss the respective merits of the two methods and say which you consider the soundest from an accountant's point of view. (Ill.)

6. An insurance company buys $50,000 7% 10 year bonds at 116 for investment. The bonds will mature at the expiration of 5 years. What should be done with the premium? (N. Y.)

7. "A" Company invests $135,000 in stock of "B" Company, receiving 1,000 shares. The books of the "B" Company at that time disclosed the following: Capital Stock, $110.000; Surplus, $38,500. During the year immediately succeeding the purchase, the "B" Company earned $19,250 and at the end of the year, declared a dividend of $57,750. What sum can "A" Company assume as profit. (XXX.)

CHAPTER XII

Capital Assets

Capital Assets represent the acquisitions of a concern which are intended to be of a permanent nature and which are presumably purchased from the Capital Income.

Their permanence in the business requires that they receive a different treatment than that given the assets which are to be immediately disposed of or which are held ready for immediate disposal. The principal differences being that due allowance must be made for the decrease in the value of the property from day to day owing to the approach of the time after which it will be impracticable or impossible to use it and also to the necessity of counteracting, to a certain extent, the result of the use of the asset.

The fact that they are often purchased with the Capital Stock of the concern, which, in general, is of an indeterminable value and which it is usually desired should appear to have been exchanged for articles possessing at least its face value, gives rise to the inflation of the value of the assets which are acquired with it.

As an example, take the case of a concern incorporated to acquire the assets of some particular plant. At the time of incorporation it is usually desired to give stability to the firm by having a considerable Capital Stock and by having it appear as fully paid. In order to accomplish this without investing additional funds in the corporation, it is customary to take over the assets of the firm at the par value of the stock given in exchange, even

though the assets do not possess a value equal to the predetermined value of the stock, then, in order to make the value of the assets acquired indeterminable, it is considered necessary to place them on the books in an indefinite manner, say as Plant or Equipment, without an appraisal or inventory.

This mode of procedure should be discouraged whenever possible for it not only misrepresents the actual worth of the concern but it also makes the earnings of the concern appear to be considerably less than they actually are as, no matter at what value the asset may have been acquired, during its life, this value must be cared for by charging it, in installments, against the earnings of the business; and, if the amount at which it is placed on the books is excessive, the annual installments under the inflated value will be proportionately larger than they should be and the earnings will appear smaller than they actually are. It is undoubtedly more desirable to show the Capital Assets at their appraised value and to have the books display the difference between this value and the par value of the stock, which is given in exchange for the asset, as a discount on the stock or, if conditions warrant, as goodwill. In either case, if desired, the excess could be written off out of Surplus without disturbing the actual earnings as displayed by the books.

Conditions do arise where a concern may purchase certain articles which will require rebuilding or reconstruction before being available for service. The rule that the asset must be in actual working order and ready to operate before capital charges cease holds true in this case, as in others, and all expenditures made in preparing the asset for such service are properly chargeable to the account representing the asset and therefore repre-

sent a Capital Expenditure; provided, however, that at the time of purchase the asset was known to be in such a condition that additional expenditure would be necessary before it would be ready for service, otherwise the expenditure or at least a portion of it would represent a loss on the purchase and would be a charge against "Net Profits."

It is also possible that, in order to secure a certain business, a considerable number of assets might be purchased with the business which, although a portion of the Capital Assets of the vendors may not be desirable for the purposes of the vendees and which would necessarily be discarded shortly after their acquisition to make room for more modern equipment. In this case, at the time of purchase, the undesirable machinery should have been placed on the books at its scrap value but, if it was not at the time of its sale, the book value should be adjusted and any difference closed into Goodwill. Of course, if at the time of purchase it was intended to use the equipment and if it was believed to be desirable for the purposes of the new concern and if its purchase price was made accordingly, it would represent a loss on the purchase and would, more properly, be a charge against "Net Profits," in which case, if the loss represented a considerable sum and if it caused an impairment of Capital, it would be undesirable and improper to distribute additional Capital as dividends.

Goods might also be acquired on the installment plan, the purchase price of which would, possibly, be considerably in excess of the cash price that would have been secured had the money been available. Such purchases, if they amount to any considerable sum, should be apportioned over "Cost" and "Interest on Installment Purchases." The Interest account could then be reduced from

period to period proportionate to the life of the contract and the amounts outstanding from term to term.

During the time a concern is being prepared to operate there are many expenditures which may or may not be properly charged to the Capital and many differences of opinion exist as to just what is proper under certain conditions. The principal points of difference refer to the expenditures incurred in floating the organization and will be dealt with next.

Organization Expenses.

The Organization Expenses of a corporation may properly include all legal expense incidental to its organization, the incorporation fee, seal, stationery, prospectus, commissions or other expense incidental to the sale of stock or bonds, rent, salaries and, in fact, every expense of every kind which may properly be incurred in organizing the concern. This sum is placed on the books as a Capital Asset but, in general, is written off during the first few years of the life of the organization. In the case of concerns operating but a limited period, it may be spread over the life of the organization but the former method is usually preferred.

A Discount on the sale of stock should not under any condition be included in the Organization Expenses. In fact, it is doubtful if a company has authority to dispose of its stock except at par or at a premium; but, should such a procedure seem justifiable owing to the urgency of conditions and should occur, the discount should be separately stated on the books and should be wiped out from future profits by a charge against Surplus, or, more properly, Dividends Payable Account; the object of so doing being to complete the payment on the stock by reverting funds which would properly fall to the stockholders un-

der normal conditions, toward its payment, thereby virtually paying a dividend and then receiving payment for the balance due on the stock.

The actual amount of expenditure incurred during the period of incipiency, as interest on a Bond issue, may possibly be included as an Organization Expense but it is believed more practical to include such a charge in the Construction Account.

Bonds Issued for Construction Purposes.

The facts that bonds are issued for construction purposes in no way affects the final disposition of any discount or premium that may enter into consideration at the time of their disposal. As explained in a previous chapter, any difference that may exist between the par value of a bond and its market value may be traced to a difference between the interest the bond bears and the value of money at the time of its disposal. This, of course, has no bearing whatsoever on the cost, in dollars, of the property constructed from the funds secured by the sale of bonds.

The effective rate of interest paid on the bond is a charge for the use of the money and if it accrues during the time a concern is in operation it is properly a charge against Net Profits; but that portion of the interest that actually accrues during the time a concern is being prepared for operations, is a charge to some Capital Asset, usually Construction or Plant Accounts.

The effective interest is the interest charged after caring for the annual adjustment of the "Discount on Bonds" or the "Premium on Bonds" Accounts. These accounts having been placed on the books, at the time the bonds were disposed of, to contain the difference between the sale price and the par value of the bonds, with the intention of adjusting any difference that might ex-

ist between the interest actually paid and the amount of expenditure incurred during each year through them.

Proper Charges to Capital After Organization.

The method of operating the accounts of an undertaking materially affects the manner of handling future expenditures. Certain corporations are organized under a provision that a considerable portion of the money invested must be devoted toward the acquisition of certain predetermined fixed assets and that these assets must be maintained from year to year during the life of the organization. Under this plan of operation no charges are made for depreciation, neither are additional expenditures capitalized even though they are a betterment to the concern, except, of course, that they actually enlarge the scope of the organization or complete some step already contemplated in the original plan of organization.

Double Account System.

This plan of operating the accounts is usually classed as the Double Account System, principally on account of the form given the Balance Sheet owing to the desire to distinguish between the expenditure on Capital Assets and the Working Capital. In the Balance Sheet, the Capital Assets are shown in comparison with the Capital Liabilities; the balance, representing the excess of the Capital Liabilities over the Capital Assets, being carried forward into a second section as Working Capital.

There are many objections to the working of the system and as it is but little used we are devoting as little space to it as possible.

Single Account System.

The Single Account System—that in general use—properly distinguishes between Capital and Revenue Ex-

penditures and takes into consideration the value of the use of the property.

Under this system, and as outlined in the chapter on Capital and Revenue, all expenditures which actually increase or extend its operations or make its operation more permanent should be charged to the Capital Assets under some appropriate heading; all others should be charged to Revenue. As simple as this rule may seem, there are many puzzling circumstances which cause trouble in determining just what is and what is not a proper charge to either of these classes of accounts.

Articles Prepared for Use of Firm.

In general, we believe that a firm is not justified in carrying any fixed asset on its book in excess of its actual cost—surely no firm would be justified in accepting as profits and in declaring as a dividend any profit presumed to have resulted by making a portion of their plant or equipment in their own shop. In estimating the cost of such an article it would be proper to include everything connected with its construction and preparation for operation, including the oncost or overhead charges, which item would properly include a portion of the superintendence and management of the factory as well as rent, heat, light, etc., but, should an occasion arise, wherein owing to mismanagement or miscalculations, the article prepared by the firm for its own use should cost more than the actual cost of such an article if purchased through outsiders, it would not be proper to place the entire cost on the books as a charge to capital; preferably, the loss or excessive cost should be charged against Net Profits during the current period and the market price placed on the books as the value of the article.

Moving and Altering.

Moving or altering a plant, in general, does not materially increase the capital value or the stability of the organization and unless there is a distinct betterment, it is believed desirable to charge the entire amount to revenue during the period in which it occurs; of course, if the charges for alteration or moving amount to a considerable sum and if such action will reduce the operation expenses to any great degree in future years, it would not be proper to allow the current year to suffer the entire amount to the benefit of future years; therefore, the expense incidental to moving or altering may be properly spread over a number of years if such a course is desired.

Replacements.

We believe that the generally accepted use of the term replacement, in accounting, is in reference to the removing of one article and the substitution of another of the same or greater value as distinguished from a renewal which simply makes good some already existing article by a process of re-manufacture or extensive repairs.

A replacement, then, should result in a credit to Plant or Machinery Account for the value of the article displaced and a charge for the article substituted. If this plan is followed closely and care is taken in ascertaining the actual book value of the article replaced, very little difficulty should occur in handling such items.

In ascertaining the value of the article displaced, the process is considerably simplified if it is possible to refer to a Plant or Equipment Ledger to find the cost of the article and also its reduced value; but, if such a ledger is not maintained, the book value of the individual article

can be easily determined if the date of purchase and the rate allowed for depreciation is known.

Occasions often arise wherein extensive replacements become necessary but where proper provision has not been made for the obsolescence of the article displaced, in which case a considerable loss will result at the time the obsolete article is removed, owing to the failure to realize the book value of the article scrapped. This loss should have been provided for during previous years, but if it was not, it should become a charge against Surplus. If there is not a sufficient Surplus after crediting the current year's profits to cover the loss and also a dividend, no dividend should be declared. In general, however, if a concern is in a healthy state and if under old conditions while operating the obsolete equipment it was able to make a fair profit and if future conditions, under the operation of new and improved equipment, are such that a considerably larger profit may properly be anticipated, it is customary to spread the loss over a considerable number of years and to declare a small dividend from year to year even though the loss has not been entirely cared for.

In case an organization entirely replaces some of its fixed assets at a considerable expense, the expenditure may or may not result in a direct increase of the earnings of the organization owing to the purpose of the asset, as in the case of a steamship company replacing a dock with a larger, more modern and much improved structure, and considerable doubt exists as to whether the expenditure could properly be capitalized. In general, where an expenditure of this kind is made it is done with the intention of improving the service to the public, maintaining their goodwill and securing a continuation of their business, therefore, as the stability of the organi-

zation is increased and as there is undoubtedly a betterment of fixed assets, the expenditure should be capitalized and the old asset displaced on the books.

Conversions.

In the operation of many classes of undertakings, certain portions of the equipment become unsuited for the purpose for which they are being used and it becomes necessary to replace them by larger, more modern or better articles, although, owing to the scope of the undertaking, the displaced articles may be converted into use in some other place. This brings up the question of the value at which the part converted into use in the new place should be placed on the books, i. e. should the book value remain on the books, or should the asset be conconsidered at its market value and the new department or district as the purchaser at that price.

The latter valuation is often adopted by accountants but it seems rather hard to determine with any degree of accuracy as the market value of used material is generally a question of barter rather than of a quotation and, as no attempt is to be made to dispose of the article, the opportunity of barter is lost and the estimate of value must be simply a conjecture; therefore, so long as the book value is not exorbitant and the value of the asset has been depreciated from year to year during its life, it is believed proper to allow the book value to remain on the books irrespective of the location of the asset, provided it still remains in use.

In either of the cases mentioned above, all cost of removing the old asset should be charged to revenue. In case the book value remains on the books, the cost of installing should also be charged to revenue; but if the market value rules the cost of installing could properly be capitalized.

Appreciation from Outside Sources.

The effect of outside conditions on the Capital Assets should be ignored, viz., even though the property of an organization may have greatly increased in value, no effect should be given this increase until the property has actually been disposed of, for, no matter how much greater the value may be, no profit could be accepted as available for dividends until it had actually been realized.

In cases where it is particularly desired that the asset be written up on the books, to its estimated value, and this is done, care should be taken to credit the amount representing the increase to some special reserve account, properly headed, so that under no condition could it possibly be considered as closeable into Surplus and eventually into Dividends Payable, thereby resulting in a fictitious dividend.

C. P. A. Questions

1. A corporation, having acquired a manufacturing plant, discards shortly after its acquisition a large portion of the machinery and replaces it by machinery of a more modern type. (a) What do you consider is the correct method of dealing on the books with the book value of the discarded machinery? (b) Do you consider that it would be proper for the corporation to pay dividends until the value of the discarded machinery had been written off out of profits? Give full reasons for your answer. (Wash.)

2. What is the proper manner of placing assets on the books where payment has been made in stock, the face value of which is greatly in excess of the actual value of the asset? (XXX.)

3. If a company, duly organized, acquires several plants that are found to be in a "run down" condition and to require extensive outlay for repairs and renewals to bring them up to the required state of efficiency, should such outlay be charged against Capital or against Revenue? Give reasons. (N. Y.)

4. A corporation issues bonds, proceeds to be used for construction purposes. If bonds are sold at a discount, to what account should the discount be charged? If sold at a premium, to what account should the premium be credited? (Ill.)

5. In the construction of a large building the proprietors issue \$800,000.00 20-year 6% bonds which are disposed of to the contractors at 85% of their face value. You find, upon examination, that the discount of 15% has been charged to Construction Account in the first ace, and then to Building Account.

State whether you consider the final entry legitimate or not, and give reasons. (Ill.)

6. After the organization of a corporation, it proceeds to construct a manufacturing plant, paying for the same in cash realized from the sale of capital stock at 80 cents on the dollar. When ready for operation, what items would be included in the cost of such a plant? (Ill.)

7. Do you consider that interest paid on Capital during the construction of a dock should be charged to Capital? (XXX.)

8. What is usually included in the account "organization expenses" in the books of a company? How should this account be treated? Give reasons. (N. Y.)

9. Can or cannot, a going concern, employing a salaried manager and superintendent, charge any part of their salaries to cost of improvements or extensions that may be added to the plant at intervals? In either view, why? (Ill.)

10. A concern engaged in building locomotives wishes to equip their machine shop with some new machinery of standard types, and determines to have it made in their own plant by their own workmen from material which they have in stock. By this means it will cost much less than if they bought it from outsiders. They desire consequently to charge their "Machinery and Large Tools" account with the current market price of the machinery so produced, on the ground that their workmen, while making it, have been detached from other profitable employment.

Discuss this question pro and con, and say what you would advise to be done, giving reasons. (Penn.)

11. The North & South R. R. Co. has demolished its old wooden station at a certain city on its line and has

erected in its place a larger and more ornate structure of brick and stone, at a cost of $100,000.00 in excess of the book value of the old building after deducting the salvage. Bearing in mind that this expenditure of $100,000.00 does not materially increase the earning capacity nor decrease the operation expenses of the company, what disposition should be made of this item in the accounts?

State the general principles that should govern an accountant in dealing with this class of expenditure, whether occurring in a railroad or any other property. (N. Y.)

12. A manufacturing concern, having increased its capital and invested considerable money in new machinery and in the construction of old machinery, removes to a new location and charges the cost of moving and the reconstruction of its old machinery to one account termed "installation." Explain fully how this account should be treated in closing the books of the company and give reasons. (N. Y.)

13. A factory makes large outlay during a year for alteration to plant, how would you treat such expenditures? (N. Y.)

14. The Real Estate holdings of a manufacturing Corporation, of which you are auditor, have substantially increased in value since their purchase. The directors have caused the Real Estate Account on the books to be debited and Profit and Loss Account credited with the amount of the increased value.

Do you consider this procedure justified? State reasons for your answer. (Wash.)

15. Expenditures are made by a corporation for items of each of the following classes: (a) taking down a machine in one part of the factory, moving it and putting p in another part, (b) expenses of incorporating the

company, including state charges and lawyer's services, (c) brokerage on purchase of a piece of property, (d) commission on an issue of debenture bonds, (e) cost attending a mortgage, (f) furniture and fittings of a city office and salesroom, (g) costs of patents, including solicitor's charges and government fees. Which items should be charged to capital and which to revenue? State reasons for your answer in each case. (N. Y.)

16. After appraisement, a manufacturing corporation increased the book value of its real estate to the appraised figure, carrying the amount of the appreciation to Undivided Profits Account. Shortly afterwards, the corporation declares a dividend to pay which, a part of the Real Estate Appreciation is required. Do you consider that the corporation is justified in treating appreciation of real estate as an earned profit (assuming the real estate to be used for the purpose of the business) and in paying that appreciation out as dividends. State fully reasons for your answer. (Wash.)

17. A suburban traction company after equipping its lines at a very considerable expense for overhead trolley and operating same for several years decides to adopt the third rail system. Extensive changes are necessary in changing power houses, re-arranging tracks, and altering cars, involving an expenditure of $25,000. In addition considerable machinery and rolling stock, the original value of which had been treated as a capital outlay and was carried on the books at a valuation of $25,000 is rendered obsolete and is disposed of for $3,500, showing a loss of $21,500. The profits from operation for the year are $18,000.

State how you would recommend that the matter be dealt with in the company's accounts and whether the company can pay a dividend? (Ill.)

CHAPTER XIII.

Depreciation

Depreciation in its broadest sense is an impairment of value. As applied to accounting, it represents the impairment due to wear and tear, obsolescence or effluxion of time.

Depreciation Charge.

Any allowance that may be made for depreciation should give consideration to these items and should be made with a view of caring for the entire impairment during the period of active life of the asset.

The easiest mode of application seems to be to make a simple rental charge against operation to cover the use of the asset.

One portion of the business, taken as a whole, should not profit at the expense of some other portion, therefore, this rental charge should be made as nearly actual cost as it is possible to estimate, or looking at it from another standpoint, a sufficient rental should be charged against operation to cover the cost of replacing the asset at the time it becomes necessary to discard it.

The plant, etc., is consumed in the production of the article manufactured, therefore, any charges that are found necessary in maintaining or renewing it should be shown as a specfic item of cost. The fact that depreciation goes on irrespective of operation is not of itself a sufficient argument to warrant its elimination from the accounts representing the cost of the articles produced; but, if during any particular period there is a term of idleness, the depreciation that occurred or that is esti-

mated to have occurred could easily be separated from the portion directly traceable to operation and could be treated accordingly. During periods of slightly decreased output we believe the regular depreciation charges should be made.

Buildings may or may not be used exclusively in production, and in cases where the depreciation of the building represents a portion chargeable to cost and also to selling or administrative expense, it is desirable to charge each department with its portion, but to consider it as a rental charge and then to offset the rental that has accrued during the year by a charge for depreciation.

Necessity of Providing for Depreciation.

It has often been contended that, if the profits of any particular year did not justify, no provision for depreciation could be made. This theory is surely a fallacy, for no matter what loss might result during a year exclusive of depreciation, the impairment of the asset occurs and should be cared for.

Depreciation is in no sense like a dividend, which can be increased or decreased proportionate to the profits available. One is an element of cost and the other simply a distribution of the profits, and although the provision for depreciation directly affects dividends, the declaration of a dividend in no way affects depreciation.

Every purchase of material or plant is made with the intention of consuming it in the process of manufacture. In the case of the material, except possibly in the case of mines or quarries, the residue is apparent and the amount used may be easily recorded, but in the case of the plant, it is almost impossible to properly record the amount consumed. At some future date the plant will be discarded probably because it is worn out or more

likely to allow the installation of some more improved article; in any case the day of its final discard is approaching and provision must be made from period to period for its impairment.

In the case of very large undertakings, it has been contended that there is practically no depreciation for owing to the scope and the intended continuity of the organization and the necessity of thorough and continuous overhauling to keep the asset in a high state of efficiency for continued operation, the expenditure for repairs and renewals would be sufficient to maintain the asset and at the end of any period, the asset would be worth, so far as the operation of the business was concerned, an amount equal to its purchase price and book value.

This argument may be theoretically correct but in actual practice, owing to the inconsistence of human nature, it does not work out satisfactorily. Where depreciation is not accounted for and where the repairs and renewals are supposed to maintain the asset, the tendency of managers is to gauge the expenditure for such work according to the profits of the period. During unprofitable years repairs and renewals are dispensed with, with the result that not only are future years compelled to stand the expense of the prior years but, as the failure to make repairs usually results in greatly increased depreciation, they must stand this additional loss also, and profits are incorrectly stated from year to year.

There is also a tendency amongst new managers, particularly where they have taken over the management of a plant which is in a run down condition, to increase the Capital Account with the amount expended on repairs and renewals for, as they claim, these repairs should have been made during the previous regime and should

not be charged against the current year's operation. This also results in an improper profit and should not occur in any well regulated organization.

Many cases arise where profits are purposely inflated by persistently giving Revenue the benefit of all doubtful expenditures and increasing Capital with the amount thereof, with a corresponding increase in the profits for the period; such an inflation of profits invariably results in a fictitious dividend and a consequent impairment of Capital, therefore, if the practice of capitalizing items which are properly a charge to Revenue were to continue for any considerable period, the organization would be sadly handicapped, owing to a lack of capital, and would eventually have to cease doing business.

The argument that the appreciation of the Fixed Assets more than covers the depreciation of the Plant and therefore makes it unnecessary to provide for the depreciation, is often heard, but this also is not based on sound logic. The simple fact that a portion of the property is worth more, is not sufficient excuse for assuming that a profit has been made upon it. In fact no profit can be considered until the sale actually occurs and it is realized. Therefore this increase in value should not be allowed to offset the proper charge to Revenue, the elimination of which would result in an increased apparent profit. Furthermore, the increase may, we believe, be properly assumed to affect land only, which if used for ordinary commercial purposes is not presumed to depreciate and for which a depreciation charge is seldom made. Its increase on the books would not, in any case, affect the earnings of a business, and, if given effect at all, it would appear as a credit to an account headed "Appreciation of Real Estate—Not available for dividends" and not to the credit of Revenue, therefore, its appreciation

should not be used as an offset to the depreciation on some other asset which the business is supposed to maintain out of Revenue.

If the Plant or Equipment itself could, under any possible condition, be presumed to have increased in value and provided that it was considered proper to give this increase effect, would not the annual charge for depreciation, which is nominally a charge for the use of the asset, be properly increased rather than diminished?

One writer states that depreciation should not be considered as a charge against operation for it goes on irrespective of operation. The latter fact is undoubtedly true, in fact it is possible that an article may suffer more during enforced idleness than it would if properly cared for during a much longer term of operation, but, even so, the asset was purchased with a view of consuming it in the production of the articles to be manufactured or in the course of operation and its cost should be included in the cost of articles produced during the period of use.

If during any particular period no articles are produced or it is not operated, then the depreciation must be taken from previously earned profits, or if no Surplus or Undivided Profit is available, it results in an impairment of Capital and should be shown as such on the books of the undertaking.

From a legal standpoint there is a growing demand that depreciation be cared for in the accounts of all undertakings, particularly corporations. The Interstate Commerce Commission demands it of transportation companies. The majority of state laws affecting the operation and accounting of public service corporations provide for it. The Internal Revenue Department allows it as a deduction from Gross Income, and the directors

of all corporations are invariably held responsible for fictitious dividends, therefore, we believe, we may state that an allowance for depreciation is not only necessary from an accounting standpoint but from a legal standpoint as well.

Methods of Computing.

The annual charges to Revenue may comprise:

(a) The amount expended for repairs and renewals and also an equal portion of the cost of the asset based on its active life and giving consideration to its residual value, if any.

(b) The amount expended for repairs and renewals and also a certain per cent. of the book value of the asset. The book value to be reduced each year by the charge for depreciation, thereby resulting in a corresponding reduction in the charge to Revenue.

(c) A proportionate amount of the estimated expenditure on the asset during its life, including its cost and the repairs and renewals.

(d) The difference between the appraised value of the asset at the beginning and the end of each period and also, if they were not charged to the asset direct, the expenditures for repairs and renewals.

Interest.

Either of these may be varied slightly by including interest on the book value of the asset in the charge to Revenue, but, except in the case of a leasehold, it appears that, so long as the asset represents necessary equipment of the undertaking which could not be purchased from year to year and which does not represent a purchase in advance of actual requirements, the earnings of the undertaking must represent the return for the Capital invested, and such a charge is unnecessary.

Annuity System.

Mention is often made of the Annuity System of Depreciation. This is a co-ordination of plain "C" but varies from it by the inclusion of interest, based on the assumption that depreciation should include this as well as Repairs and Renewals.

This plan results in a like charge to revenue each year, but as the interest is based on the decreased book value from year to year, it continually decreases and results in a decreased credit to Net Profits.

Replacement Fund.

A fund might also be provided by investing an amount, equal to the charge for depreciation, in securities or by depositing this sum in some depository from which replacements might be made without interfering with or crippling the business. The plan, however, is very seldom adopted as it results in removing what is usually much needed capital from the business and placing it in some quickly realizable form where it can earn but a very small sum in comparison with its value to the business, and as in very few cases can a property be supposed to require replacement all at once or with such rapidity that, in the ordinary course of business, its purchase could not be accomplished without serious difficulty. Where the plant is expensive and short lived, the plan often proves very satisfactory.

Effect of Each.

Each of the methods outlined possesses advantages under particular conditions; for instance, the plan "a", of spreading the cost of the asset in equal portions over its life, is desirable where the active life of the asset is known and where its residual value can be determined

with a degree of accuracy and where it is desired that each year stand an equal portion of the cost of the asset.

The plan "b", of making a charge of a certain per cent. of the reducing balance of the book value of the asset results in decreasing the charge to revenue for depreciation during the later years of the life of the asset when the repairs and renewals may be supposed to increase, and also in retaining some sum to represent the residual value no matter how long the asset may remain in use. This makes the plan very desirable in the case of machinery and similar items which possess a residual value and which it is desired should always appear in the books.

In the case of machinery, in particular, it may be safely assumed that the annual charge for repairs, renewals and depreciation will vary from year to year and, in theory, plan "c" possesses a distinct advantage as the annual charge to Revenue always remains the same. This plan, however, is based more on estimates than either of the others and loses much of its merit on that score but, provided that all repairs due to accident are charged to Expenses and eventually to Revenue, it may still be equally as accurate as either of the others. It possesses an advantage in that all charges in the way of renewals increase the book value of the asset and allow, as they undoubtedly should, for an increased life of the asset. This plan like "a" has the disadvantage of entirely wiping the asset account from the books and should be avoided wherever the asset has a residual value.

In theory plan "d" is the best, but in actual practice it is found to be the most inaccurate of all, resulting in great variation in the annual charges to Revenue. As a proof of either of the other methods, an appraisal is desirable, but no effect should be given it on the

books unless there is a considerable discrepancy between the appraised value and the book value, and unless the difference arises through errors in the depreciation allowances rather than through changes in the market value of the article appraised or the parts thereof.

If it is considered necessary to give effect to the appraised value, the book value should first be reduced by the regular charge for depreciation for the period under review, then the Asset account should be adjusted through the Surplus or Undivided Profits accounts and the rate of depreciation should be changed to a more accurate one for future use. Often, simply correcting the rate for use in future years is all that is considered necessary and, taking into consideration the possibility of an inaccurate appraisal, it is better to do this than to adjust the account, except that past estimates of depreciation have proven wholly inaccurate.

Repairs and Renewals.

Repairs and Renewals are, as stated, a charge to Revenue, either by a direct charge during the year in which they occur; by a charge of an equal portion of the estimated amount to be expended during the life of an asset, as outlined under plan "C"; or, in cases where use greatly depreciates the asset, by a certain amount per unit of production.

Although the rule seems very simple, it is often hard to apply. This is particularly true in the case of extensive repairs which greatly increase the value of the article repaired not only from an operating standpoint but as an asset as well, and the tendency is to capitalize the expenditure. It is believed better, however, where plans "A" or "B" are used, to charge the entire expenditure to Revenue, unless the repairs involved amount to practically redesigning or rebuilding, in which case it

might be well to have the asset appraised. The book value could then be increased to the appraised value and the balance of the expenditure charged to Revenue.

Of course, if plan "C" was being used, the additional expenditure would have no effect on the annual charge to Revenue except, possibly, to increase it if the repairs were out of proportion with the estimate. If, in this case, the expenditure entirely wiped out the amount that had been allowed for repairing the asset and resulted in an increase in the book value of the asset which was not warranted by the actual conditions, the amount of the expenditure, which was in excess of the amount provided, should be closed into Revenue and the annual charge to Revenue should be adjusted so that in the future a sufficient amount would always be available to cover any repairs that might be necessary.

Consideration should also be given the effect of not making repairs promptly. This undoubtedly results in a greatly increased charge to Revenue but it is a matter of scientific management rather than of accounting and all the accountant can hope to do is to see that the repairs, no matter how great, are properly charged to Revenue during the year they occur, as outlined above. Of course, if the current year would improperly suffer by this method and if the repairs were traceable to prior years, a portion of the expenditure could be closed into Undivided Profits as affecting those particular years.

Obsolescence.

Undoubtedly one of the most uncertain factors in determining the proper charge for depreciation is that of obsolescence. It is almost impossible to compute, with any degree of accuracy, the advance that may be made in the construction of any particular class of machine.

It is also almost impossible to decide, even approximately, how long any particular mechanical device will provide the required output to keep up with the demands or whims of the trade. Take the case of an electrical machine, it might answer the requirements for many years but the advent of a new or improved machine or an unusual increase of business, might make it imperative that it be discarded; or take the case of a typewriter, there are already a number of devices patented and in operation which are intended to supersede it. No one can tell just when they will be able to satisfy the public but sooner or later the manufacture of typewriters will cease and provision should be made so that at that time nothing will remain on the books of the manufacturer to represent the working value of his machinery unless, by chance, he could hope to be able to turn it to good use in manufacturing the new article.

A consideration of the rapid advance of this particular article leads us to believe that much of the profit that has been made in their manufacture and sale has been eaten up by the purchase of new machinery, especially adapted to making new and improved parts, to replace other machines even before they are worn out, and in the decrease in the value of stock owing to the improvements on, and the production of, later models.

Provision should have been made for this in the early years of the industry and, if it was not, little can be hoped for in current years in the way of a satisfactory profit.

The rapid strides made in the construction of these machines signal the early appearance of a perfect article which, if history repeats itself, will almost immediately give way to some other article, built on different lines, which will do the work in half the time or without the

effort. In the meantime provision must be made to care for this contingency.

An article might also become obsolete in a certain sense, so far as the business in concerned, long before it becomes useless for the purpose for which it was made. This occurs in the case of fixtures which are attached to leased property and cannot be removed by the lessor at the termination of the lease. So far as the lessor is concerned their life expires with the lease and provision must be made to cover their value before that time.

Abandonment of Property.

In general, where property is abandoned, the asset account is reduced to the scrap value of the property and, if provision has not been made during the life of the asset to cover its entire obsolescence and depreciation, the difference is closed into Undivided Profits or Surplus as chargeable against prior years.

Sale of Property.

At the time of sale of a portion of the property, an element of doubt exists as to the proper entries to make in adjusting the accounts representing the assets. Usually the property account represents the purchase price of the assets and some subsidiary account represents the deductions that have been provided for. In general, the provision for depreciation, etc., has been in accordance with some well defined rule during the life of the assets, therefore, in ascertaining the book value of the particular asset sold, it is possible to ascertain its cost price and, based on its life and the rate adopted for depreciation, its reduced value. Any difference that exists between the book value and the sale price should be closed into Surplus or Undivided Profits on the theory that either too

much or too little has been allowed for depreciation and obsolescence.

If the property of a concern consists of many articles and, if owing to their great number and variety the above outline becomes impracticable, it is suggested that a record be kept of each article in a Plant Ledger and that the record cover the purchase price, repairs, and depreciatilon and, after its sale, the sale price and adjustments necessary to close the account. Such a book is most valuable in determining the proper rates for depreciation, the relative values of different brands of articles, etc., and is explained more fully under a more appropriate heading.

Wasting Assets.

Although, undoubtedly, every visible asset is subject to depreciation, certain undertakings, except possibly under certain conditions, do not consider it necessary to allow for this depreciation in their accounts. This particularly refers to the accounts of non-permanent undertakings such as those operating a single ship, a mine, a quarry or a patent covering a novelty which may or may not please the public.

In each of these cases the undertaking exists only during the life of the asset and may end at any time owing to a fad of the public, an accident or the exhaustion of the material on which to work. As no provision could be made with any great degree of accuracy to cover the portion of the value that should be charged against each period and, as the undertaking is to cease with the life of the asset, it is contended that no good can be accomplished by withholding any portion of the income to provide for replacements, although, usually, it is considered proper to provide for repairs and renewals, or the depreciation of machinery which may require replacing during the life of the undertaking.

The principal objection to the plan of ignoring the decrease in value lies in that stockholders receive as dividends not only the profits of the undertaking but a portion of the capital as well and, as they are unable to determine the amount of each, their tendency is to consider the entire dividend as profit and to treat it accordingly with a consequent impairment of their capital.

The usual objection, raised in connection with providing for depreciation or exhaustion in connection with such undertakings, is that if provision is made, it results in the accumulation of a considerable sum of money in the company which is not required by the undertaking and which could be more profitably used by the stockholders.

In connection with such undertakings, we believe, special mention should be made of the necessity of providing for depreciation or exhaustion, even in the case of mines, ships, etc., where the undertaking is to be of a permanent character. That is if, after the one mine is exhausted or during its life, other mines are to be purchased or if the organization expects to continue to operate and to acquire more property and cannot be said to be organized for the single purpose of working the one asset, provision should be made for the depreciation or exhaustion of the assets comprising their property the same as of other lines of business.

We also wish to state that, in our opinion, the term depreciation hardly applies to the decreases in the value of mines, quarries or timber caused by the removal of material. In these cases, it seems to be a question of determining the proportionate cost of the material removed rather than the depreciation. To be sure, depreciation in its broadest sense means any decrease in value but, as applied to accounting, its use is restricted to decreases

due to wear and tear, obsolescence or effluxion of time, and none of these apply in the cases mentioned above. If they do depreciate, it is in the same sense that a cargo of wheat depreciates when a portion is sold rather than as a machine would depreciate through use or a copyright through expiration of time; hence, it seems impractical to try to apply the rules of depreciation.

Rates on Different Objects.

Land and Appurtenances.

Land may, in general, be presumed to maintain its value and cannot be subject to depreciation. In the case of farm lands consideration should be given the cost of recuperating the land from the income derived through the crop. Except, in rare cases, this is considered as a direct charge against the current year's operations.

Orchards require replacing from time to time either on account of the age of the trees or on account of the demand for new or improved varieties but, as the new trees may usually be brought to bearing before the older ones are removed, the expense is not considered sufficiently large to make allowance for, except, possibly, to spread it over a few years' earnings. Expenses incurred in bringing the original trees into bearing may properly be capitalized.

Fences, sidewalks, etc., depreciate and, if they amount to any very great sum, should not be included with the cost of the land. Their life varies from five to twenty-five years according to the ability of the material of which they are constructed to withstand the weather and they should be depreciated accordingly.

Buildings require a separate account on account of the different rate of depreciation and, like the other articles mentioned, vary greatly in the length of their life,

depending on the material used, the manner of workmanship, the modernness of their equipment and the stability of the town in which they are constructed. Under normal conditions the minimum life may be estimated as approximately 25 years for frame buildings and 50 years for the more substantial structures. The maximum life may exceed 100 years but it is doubtful if a greater term should be allowed for on account of obsolescence and contingencies which cannot be foreseen.

Fixtures attached to the land during a tenancy should be written off during the life of the lease if they may become the property of the landlord at the expiration of that time or if they are of such a nature that it would be impracticable to remove them.

Leaseholds.

The initial cost of a lease and all expenditures made for property that will revert to the landlord, as well as the interest on the lease for the entire period should be spread in equal portions over the life of the lease. If there is a possibility of a claim arising, at the expiration of the lease, for damages or for replacing the premises in their original condition a portion of the earnings should be set aside from year to year to make up the loss.

In many cases it is considered proper to invest an amount each year equal to that portion of the total cost of the lease which is chargeable to that year so that at the expiration of the lease a fund will be available with which to acquire another lease if desired. A fund, so provided, is usually placed at interest and it is not unusual to find that this interest is allowed to affect the annual charge to Revenue. The cost and expenses incidental to the lease are not changed by the investment of a fund to provide additional finances should

they be required, therefore, no change should be made in the charges to Revenue during the period on that account.

Machinery.

The active life of machinery varies from five to forty years; electrical machinery usually being possessed of a very short life owing to rapidly changing conditions, while such articles as lathes seem to be practically indestructible and are not affected very greatly by obsolescence. Boilers last from 8 to 15 years, depending on the pressure under which they operate and the water used. Engines are of greater life, except those of the gasoline or naptha type which depreciate very rapidly. Shafting, etc., is rapidly being replaced by motors to allow the cost of operation to be more accurately recorded and to eliminate the upkeep of belting and boxes and also the loss of power incident to keeping the shaft in operation and in readiness even though the machine itself may not be required. It therefore requires a considerable reduction for depreciation.

Equipment.

On both office and factory equipment the allowance for depreciation is usually from 10% to 12½% on decreasing balances, but it is doubtful if this is sufficient.

The possibility of loss resulting through the expiration of a lease should be given consideration and any articles that it would not be practicable or possible to move should be stated in a separate account.

Horses.

The care and attention that an animal receives and the conditions under which it labors are such prominent factors in the depreciation of horses that it is gen-

erally considered advisable to have them re-valued from period to period.

Tools.

The loss on loose tools through breakage and theft is so great that it is usually considered proper to re-value them from time to time. The decrease in value should be charged against the current year's operations in lieu of an annual charge for depreciation.

Patterns.

Patterns, if made for a particular job, should become a portion of the cost of that job. Stock patterns should be inventoried at cost but great care should be given to sorting and setting aside those which are worn out or are obsolete. The most popular plan seems to be to keep a record of each pattern and the date on which it was used.

Those which are not in use or have not been used for a reasonable time should be inventoried as no value. The reduction made in the account at the time of the inventory represents the depreciation for the period under review.

Although patterns are usually inventoried at cost, there is often a deduction made to represent the wear and tear thereon but it seems that as, after the first plan or pattern has been prepared, another can usually be made so easily from it no allowance should be required.

Patents.

Patents should be entirely written off during their life. If the patent covers some article the sale of which is dependent on the whims of the public it should be closed out against the income of the first year or two.

The possibility of being compelled to protect the patent in the courts always exists and it is advisable to provide for this contingency by writing off considerably more than a proportionate part of the cost each year. Expenditures made in quieting the title or protecting the monopoly relate back to the date of the grant and, we believe, may properly be capitalized after charging Surplus with that portion of the expenditure which relates to prior years.

Where the patent is being operated as a "Wasting Asset," it is not considered necessary to write off any portion of the cost from year to year.

Goodwill.

Goodwill differs from Patents and Copyrights in that it is not terminable. It does not depreciate and no deduction need be made.

Residual Values.

Residual Value of a Machine Costing $100.00, Reduced at Various Rates Annually

Rate, %........	50.00	40.00	33.33	30.00	25.00	20.00	15.00	12.50	10.00	7.50	5.00	3.00
Time												
1 year	50.00	60.00	66.67	70.00	75.00	80.00	85.00	87.50	90.00	92.50	95.00	97.00
2 years	25.00	36.00	44.44	49.00	56.25	64.00	72.25	76.56	81.00	85.56	90.25	94.09
3 "	12.50	21.60	29.62	34.30	42.20	51.20	61.42	66.99	72.90	79.15	85.74	91.27
4 "	6.25	12.96	19.75	24.01	31.65	40.96	52.21	58.61	65.61	73.21	81.45	88.53
5 "	3.12	7.77	13.20	16.81	23.57	32.76	44.38	51.29	59.05	67.72	77.38	85.87
6 "	1.56	4.66	8.80	11.77	17.82	26.20	37.72	44.88	53.14	62.64	73.51	83.30
7 "	.78	2.80	5.87	8.23	13.37	20.96	32.06	39.26	47.83	57.94	69.83	80.80
8 "		1.68	3.91	5.77	10.02	16.76	27.25	34.35	43.05	53.60	66.34	78.37
9 "		1.00	2.61	4.03	7.52	13.40	23.17	30.06	38.74	49.58	63.02	76.02
10 "			1.74	2.83	5.65	10.72	19.69	26.30	34.87	45.86	59.87	73.74
20 "					.31	1.15	3.88	6.94	12.16	20.93	35.85	54.37
30 "							.76	1.84	4.24	9.60	21.46	40.09
40 "									1.48	4.39	12.85	29.56
50 "										2.00	7.69	21.80
60 "											4.60	16.08
70 "											2.75	11.86
80 "												8.74
90 "												6.45
100 "												4.76

C. P. A. Questions

1. It has been stated that, in a given year, the Plant of a business cannot be depreciated because a sufficient profit has not been made. Is this correct? (XXX.)

2. Distinguish between Depreciation and the Fluctuation of assets. (XXX.)

3. Define obsolescence. (XXX.)

4. One author claims that depreciation is not a charge to manufacturing as it goes on independent of operation. Discuss the assertion. (XXX.)

5. May depreciation be waived on the theory that it is fully covered by the appreciation of fixed assets? Is there any sound argument in favor of this? (XXX.)

6. How are the depreciation charges often verified? (XXX.)

7. A few years ago a great many undertakings greatly reduced their output owing to financial difficulties. Should they still charge the full rate of depreciation? (XXX.)

8. Is Depreciation in the nature of an expense item or is it a disposition of part of the profits, like a dividend? (XXX.)

9. What conditions would influence you in fixing the rate of depreciation on buildings, machinery and tools, fixtures and patterns? (N. Y.)

10. Should depreciation be written off the accounts of a corporation whose properties are of a wasting nature, such as a quarry or a mine? Give reasons. (Mich.)

11. If you were asked to give advice concerning the proper rates, per cent., to be adopted in providing in the

accounts for depreciation on buildings, machinery, tools, etc., what would you recommend? (N. Y.)

12. Describe at least two methods of estimating depreciation for a manufacturing firm; state the advantages or disadvantages of each and show how the entries should be made in the books.

13. Mention the various things that require consideration when endeavoring to ascertain the proper rate of depreciation. (XXX.)

14. In determining the result of the operations of a company whose business requires the use of a large number of tools and implements, what general rule would you consider? (Ill.)

15. What is meant by the term "Depreciation?" Is it the same as ordinary wear and tear? (XXX.)

16. Illustrate the difference between Depreciation at 8% annually on the original value of Plant and Machinery, and 10% annually on the reducing book value, say, at the end of five years on $10,000.00. (XXX.)

17. (a) What is the meaning of depreciation and how does it affect the net results of a business?

(b) Where a plant is purchased as a whole, without a valuation of its different parts, how would you provide for depreciation? (Penn.)

18. An examination of the minutes and other records of the books of a corporation, preceding an audit, discloses that a re-valuation of its buildings, plant and machinery had been made by expert appraisers called in for the purpose. The report of these appraisers states that the values as determined by them were greater than those disclosed by the books. Should such increased value be entered on the books of the corporation? (N. Y.)

19. What kind of expenditures of a manufacturing business would you classify as being in the nature of maintenance and repairs of equipment, machinery, and plant, and what would constitute actual betterments? How should such expenditure be dealt with on the books? (N. Y.)

20. Explain fully and accurately the consequences of omitting to provide for Depreciation. (XXX.)

21. It is contended that it is unnecessary to write off depreciation on:

a. Freehold premises;

b. Plant and Machinery;

provided that they are maintained in a full state of efficiency out of revenue. Give briefly your own views on this subject. (Ill.)

22. During the past fiscal year a concern under audit has not shown a profit sufficient to justify paying a dividend. The manager, in order to avoid showing a loss, disregards the usual depreciation reserve charges for structures, plant, machinery, tools and implements.

What would be your view as auditor under the circumstances? Give your reasons. (Ill.)

23. Name some reason why it is important to keep distinct the various items of cost in the construction of a building containing boilers, engines, shafting, and heating plant. In the erection of the building itself, why should the cost of the foundations be kept distinct from that of the balance of the building?

24. What would be a fair allowance for depreciation per annum on the following plant assets:

Real Estate, including fences, sidewalks, tracks, etc.

Buildings and building fixtures—fireproof construction.

Factory equipment, including benches, cupboards, etc.

Machinery, both iron and wood working.

Fixed tools, both iron and wood working.

Loose tools, both iron and wood working.

Power plant.

Electric wiring and apparatus—including dynamos, motors, etc.

Sprinkler system and fire equipment.

Blower system.

Office furniture and fixtures, including typewriters, adding machines, graphophones, multigraphs, etc.

Horses and mules.

Wagons, harness and trappings.

Patterns—iron and wood—and drawings.

State your opinion—for or against—the necessity of providing for depreciation in a manufacturing business. (Mich.)

25. Note different methods by which depreciation on patents, buildings and machinery may be provided for, and outline briefly your opinion as to the most desirable course to be adopted. (Ill.)

26. A railway company leases the property of another railway company for a period of 50 years and, as part of the consideration for the lease, agrees to expend immediately $250,000 on the leased property, in order that it shall have a greater operation efficiency. At the termination of the lease the property is to be returned to the lessor in the same condition as at the time of making the lease, subject to ordinary wear and tear. What entries, if any, would you make on the books of the lessor in respect to the expenditure of the $250,000, and why? Explain fully. (N. Y.)

27. A company is about to reduce its capital stock so as to wipe off past losses. It is suggested that a fur-

ther sum be written off its plant and machinery to anticipate and provide for ordinary depreciation and thus save this charge on profit and loss for some years. What objections, if any, are there to this procedure? (Adapted from Dicksee's Advanced Accounting.)

28. Mention the various methods by which depreciation of buildings, machinery and plant may be provided for and explain the result of each method. (XXX.)

29. Discuss the different methods of dealing with, first, repairs, and, second, replacements in connection with (a) a concern that writes off, annually, sufficient depreciation to cover the life of the machinery, and (b) a concern where no depreciation is written off and where it is claimed the machinery is kept as good as new.

Can you name some other reason why depreciation should be considered in respect to machinery other than that of wear and tear? (Ill.)

30. In the machinery accounts of a firm whose books you are auditing appear charges for:

(a) New parts to replace old ones worn out.

(b) Engineer's salary.

(c) Labor setting up new machinery.

(d) Moving old machinery from one part of the factory and setting it up in another.

Do you see any, and if so, what objection to these charges being so treated? (Wash.)

31. A company is established for working a patent of which ten years are unexpired and for which a sum of money has been paid. How should the company deal with this asset? (Ill.)

32. You are asked to advise whether a company working a wasting property (*e. g.*, a mine) should, before the annual closing of its books, make any provision for the

estimated depreciation of such property, or whether it should be allowed to stand on the books at its original figure without such provision being made. State your opinion, giving reasons. (Wash.)

33. Is depreciation of plant a legitimate element of the cost of goods produced? Explain the method employed to keep plant in efficient condition out of earnings. (N. Y.)

34. What would be the effect on a statement of assets and liabilities of failure to charge depreciation against the following assets: (a) leasehold buildings, (b) fixed machinery, (c) loose machinery, (d) horses and trucks, (e) patterns and molds? Give reasons in each case. (N. Y.)

35. The secretary of a manufacturing corporation has undertaken to close its books. The balance to the credit of the profit and loss account is just sufficient to enable the directors to declare a small dividend, which they propose to do. At this juncture the services of an accountant are engaged. He finds that no provision for depreciation has been made and that all expenditures for repairs and renewals, amounting to more than the proposed dividend, have been charged direct to plant account. Show the nature of any corrective entries that should be made. What would be the effect of such entries, there being no surplus? (N. Y.)

36. A company leases for a term of 50 years certain unimproved property for factory purposes, paying a ground rent therefor of $1,000 a year. The company erects certain buildings at a cost of $40,000 which are to pass to the owner of the fee at the termination of the lease. Without going into the mathematics on the matter, state how you would treat the proposition in the books of account. (N. Y.)

37. A salt company has completed a manufacturing plant, the machinery and equipment cost being $250,000. It is assumed that because of the nature of the business the entire machinery and equipment will have to be replaced every several years. In such a case how would you recommend that current repair and maintenance charges should be handled. (Ohio.)

38. A manufacturer obtains two patents at the same time as follows:

(a) He purchases outright a patent which has only ten years more to run for the sum of $5,000, which he terms his patent No. 1.

(b) He invents a contrivance and obtains a patent on the same, the cost of which he estimates at $12,000 and which he styles as his patent No. 2.

At the end of three years he expends the sum of $5,000 in defending his patent No. 2, the decision being given in his favor. One year later he spends $2,000 in a suit he brings against a competitor for infringement of his patent No. 1, which suit he also wins.

Without giving the actual figures, state how you would treat all the above transactions and arrive at a valuation of those two patents six years after he obtained same, giving reasons therefor. (Ill.)

39. How should an incorporated coal company estimate the value of its colliery in its Balance Sheet from time to time, first as a Freehold, secondly as a Leasehold? (Ill.)

CHAPTER XIV.

Goodwill

Goodwill represents the value of an annuity which will produce an amount equal to the excess of profits that can be earned on account of an established reputation, location or monopoly.

Computing Value.

In estimating its value, the life of the annuity purchased should be carefully considered. In the case of trading concerns, it is presumed that it will last from one to six years after a sale of the property has been consumated; in manufacturing concerns, from one to four years, and in professional firms, one to two years, subject, however, to the effect of special conditions in either case; such as the expiration of a desirable lease or of patents which have provided the monopoly; the degree of restriction placed on the vendor's future actions in business; the certainty that a deceased partner or manager will not enter into competition at some later date; the fact that the vendor is a corporation and that there is no assurance that its active members will not enter competitive organizations; or the degree of control that the vendor might be able to exercise over the market where a merger is contemplated with a view of affecting a monopoly.

In determining the amount of excessive profits that can safely be anticipated, it is necessary to review the history of the concern to be transferred and to use the past profits as a basis of computations. It is very seldom that the profits for one period are set up as the amount which may be expected to accrue during another like

period, but, rather, some normal period of greater or lesser degree is used as a standard and the average profit of this particular period, per unit of time, is presumed to be the profit that may safely be anticipated during such succeeding like periods as may be determined upon as the life of the annuity, viz., at the time of the sale of an undertaking, it may be decided that the Goodwill transferred is equal to a three years purchase of the average profits for the past five years or, if conditions are such that a lesser period would be the better criterion of future profits, the goodwill might be based on, say, a three years' purchase of the average profits of the past eleven months, as was reported recently in a large merger.

After deciding the basis and the period of apportionment, it becomes necessary to determine just what constitutes the profits of the period under review.

It is clear that all earnings that accrue in the ordinary course of business should be considered and that all legitimate expenses should be placed on the books and should be deducted from the earnings to determine the actual results obtained. It is also clear that any profits or losses that occur which are not in the ordinary course of business such as losses through fire or theft, or profit due to the sale of some portion of the undertaking, a patent, an investment, or some fixed asset, should be eliminated; but there are a considerable number of items which are of a doubtful nature or which are subject to manipulation and we believe they should be explained. The most important of these are items which are a direct result of a lack of, or a sufficiency of capital. They are Interest on Borrowed Money, Cash Discounts on Purchases and Earnings on Outside Investments.

Interest on Borrowed Money only appears where there is a lack of capital, hence, when determining the profit

of any particular period based on normal conditions, this item should be eliminated.

Cash Discount on purchases is only possible when the money with which to make prompt payment is available, either as capital or as borrowed money. If it is made possible by borrowing money, the discount is correctly an offset to the interest paid. In any case, not being an element of trading, it should be eliminated when determining the future profits.

Outside Investments to obtain revenue or to provide for the redemption of bonds are invariably made from surplus capital, therefore their earnings should not be confused with those of operation; neither should unusual profits derived through particularly favorable conditions or contracts be considered.

Care should be taken to see that proper allowance has been made for the expense of management, for, as is often the case where a person has been managing his own business, there may have been no allowance for this and profits would be incorrectly stated to that extent.

Depreciation is probably the hardest of all to determine, for, possibly, the initial value of the property, as stated by the books, is entirely wrong and the final book value may be entirely different from the value at which the property is to be taken over or at which it has been appraised. It is therefore a question of exercising good judgment in determining just what constitutes a proper charge for depreciation during the period under review.

We suggest that, where the opening account balances are approximately correct as determined by applying the normal rate of depreciation and giving consideration to the abnormal conditions and the present appraised value, the appraised value should be set up on the books and the difference, if any, applied as a reduction or increase

of the charges already made for depreciation. Where the opening balance is undoubtedly incorrect the proper depreciation could be ascertained by using the appraised value as a base and working back, using the normal or, if it appears proper, some other rate as the basis of the charge.

Existing Liabilities on contracts, if they affect the revenue of the concern, should be considered also. This refers particularly to such items as the Liability existing on Guaranteed Goods or Containers Returnable which have been sold at a profit but which are redeemable at a sum in excess of actual cost.

In guarding against the manipulation of the accounts, it becomes necessary to carefully watch all items which affect the earnings of the business, consideration being given to the effect of any possible manipulation on each of the persons connected with the business. In the case of a manager selling his own business, if he were inclined to misrepresent the status of affairs, it would be by attempting to increase the apparent profit, either by suppressing proper charges or increasing the credits. If, however, it was his desire to purchase the business of his employers, his tendency would be to make it appear as poorly as possible and this could be accomplished by inflating the purchases and decreasing inventories and sales.

In the case of Bad Debts, a person selling a business could easily see that they were paid out of his own pocket at an opportune time so that the losses would not appear so great.

Sales are often padded by including Sales on Approval or Consignment Sales and taking full credit for the anticipated profit before the actual sale is consumated.

Expenses may be allowed to run on for a considerable

period without giving them effect on the books, consequently inflating the profits of the period.

Goods purchased may be included in inventories and the invoices held up or paid from some other source or the stock may be improperly valued so that an apparent profit would be derived from that source.

In all of the cases mentioned the apparent profits being greater than the actual profit, the purchase price of Goodwill would bear a corresponding increase to the detriment of the purchasers.

It is also possible that a portion of the undertaking is to be retained by the vendors and that this portion has produced a portion of the profit. This will not accrue to the vendees and allowance should be made therefor.

After having found the amount of profits that can safely be anticipated in the future, we deduct an amount to represent the normal earning capacity of the money invested. Any sum that the business produces in excess of the effective value of money may be considered as the amount of the annuity which is being transferred in the nature of Goodwill. After having determined the life of the annuity and the amount thereof, it becomes an easy matter to ascertain its present worth, which is the Goodwill value of the business transferred.

In all cases special attention should be given the articles of agreement to see whether the Goodwill is based on the actual profits or the excessive profits of a particular period. The latter method is undoubtedly the most equitable and preference should be given it whenever possible, but a much longer period should be used than where the entire profits before deducting interest on capital form the basis of computations.

Goodwill is intended to represent the value of the ex-

cessive profits that will accrue on account of being already established and of possessing those qualities which tend to attract business and to build up profits. As stated under Capital and Revenue, any expenditures incurred in starting a business or bringing it up to a profit producing stage may be capitalized. Goodwill, then, if a portion of the purchase price of a business or if it is the result of expenditures made in bringing it up to the profit bearing point, may properly be placed on the books as a Capital Asset. If, however, Goodwill is estimated to have accrued on account of a long period of prosperity or extensive advertising after the business has been running, it could not, properly, be placed on the books as such, but in the case of the advertising, there would be no harm in spreading the expenditure of any one period over a number of periods, provided that the entire amount is wiped out during the time that the business could expect to profit by the expenditure.

Nothing could possibly be gained by writing up a Goodwill account, for, surely, no business could be made more valuable by simply including this account in the books and its inclusion would not make the accounts more correctly stated, in fact, they would be incorrectly stated to the extent that, in the generally accepted use of the term, it is presumed to represent the purchase price of Goodwill, whereas in this case it only represents an arbitrary value that has been placed upon it. Furthermore, no profit can properly be taken on any article until a sale results. The writing up of Goodwill gives effect to an anticipated profit which may be mistaken for a legitimate profit and result in a fictitious dividend to the detriment of the concern.

In the case of the withdrawal of a partner, there is often a payment made him to represent his share of the

Goodwill of the firm. The Goodwill account may, under this condition, be written up to the amount his share represents. No attempt should be made to place an amount on the books to represent the total value of all the individual partner's interests in the Goodwill for only the one portion has been purchased by the members of the new firm. To illustrate, "A," "B" and "C" have been conducting a business, profit divided equally. "C" decides to retire and it is concluded to allow him $10,000.00 as his share of the Goodwill.

The Goodwill account should be written up to $10,000.00 and a like amount credited to "C's" Capital account in preference to placing the Goodwill at $30,000.00 and crediting each partner with his portion.

To summarize, Goodwill may be increased on the books: (a) at the time of the acquisition of some going concern that is to become a portion of the business; (b) during a period of incipiency to represent expenditures incurred in building up the business; or (c) to give effect to the proportionate Goodwill value of a partner's interest which is purchased by other partners.

Where a number of concerns have merged their interests and are consolidated into one corporation, there is usually considerable doubt as to the amount at which Goodwill should be placed on the books. The proper plan, if this element of doubt exists, is to appraise the assets and to set up the balance of the purchase price as Goodwill, provided that the purchase price as stated, represents cash or like value. If the purchase price is paid in stock of an indefinite value, an attempt should be made to ascertain the actual value and to adjust the property and Goodwill accounts accordingly, throwing the balance into Discount on Stock. The majority of the stockholders object to this mode of procedure and prefer that the en-

tire stock be placed on the books as fully paid. Stock, however, cannot be made fully paid by simple bookkeeping entries and if the stock is to appear as fully paid in the books, care should be taken to have the minutes cover the transfer fully, including the valuation at which each object is transferred, then the bookkeeper can do no better than record the items as he finds them.

To eliminate this uncertainty of values at the time of transfer; to satisfy the stockholders and to equalize the earnings of various concerns at the time of consolidation, it is desirable to issue fully paid cumulative preferred stock of equal value, or nearly so, in exchange for the tangible assets taken over, and to issue common stock to each concern or individual of an amount equal to the capitalized value of his earnings which are in excess of the interest value of the capital invested.

As an illustration: "A," "B" and "C" corporations are to consolidate. Their capitals are $60,000, $80,000 and $100,000, and their average net earnings $10,000, $8,000 and $6,000, respectively. Provide stock and arrange an equitable apportionment thereof.

To care for the tangible assets turned over, we will provide $240,000 (dollar for dollar, stock for property) 6% Cumulative Preferred Stock. To care for the Goodwill we will ascertain the amount of stock the companies are entitled to as the capitalized value of their excess earnings, and distribute it accordingly. The minimum desired rate of earnings we may take as 6%, as in company "C," hence any amount earned by either company in excess of 6% may be capitalized as Goodwill. We find "A" has earned $6,400 and "B" $3,200 per year in excess of the 6% on their capital, which amounts we will capitalize at 5%, giving a Goodwill value of $128,000 and $64,000 respectively.

The common stock so issued should be entitled to a dividend equal to the rate used in capitalizing the earnings, i. e., 5%, after providing for the cumulative dividend of 6% on the preferred stock. Dividends in excess of these sums should be a matter of special agreement, but in this case it would seem that an apportionment of a like amount between the Common and Preferred Stock would be equitable.

Our capitalization would be:

6% Cumulative Preferred Stock, entitled in addition to one-half of all earnings after 5% has been paid on the Common Stock	$240,000
Common Stock entitled to 5% dividend after 6% has been paid on the Cumulative Preferred and one-half of all excess earning remaining	192,000
A total of	$432,000

Earnings of, say, $43,200, would be distributed as follows:

Regular Dividends:			
Cumulative Preferred Stock, 6% on $240,000.00		$14,400.00	
Common Stock, 5% on $192,000.00		9,600.00	
		$24,000.00	
Special Dividends (Balance divided equally):			
Cumulative Preferred Stock, 4% on $240,000.00	$9,600.00		
Common Stock, 5% on $192,000.00	9,600.00	19,200.00	$43,200.00

Provision should also be made to give the Preferred Stock preference as to capital so that, in case of dissolution the tangible investment would be cared for first, and that any sum in excess thereof would be distributed the same as earnings, otherwise "C's" tangible property may be used to pay "A's" or "B's" intangible Goodwill, thereby working a hardship on "C."

Writing Off Goodwill.

Goodwill, if placed on the books at a proper valuation and in a proper manner, is a Capital Asset. As outlined in the previous chapters, a mere fluctuation in the value of a Capital Asset may be ignored, hence, so long as Goodwill cannot be consumed in the business and is not subject to depreciation like the more tangible assets, it is unnecessary to amortize or otherwise reduce its book value.

The writing off of Goodwill creates a Secret Reserve to the extent that Capital Assets will be decreased at the expense of either Surplus, Undivided Profits, or Revenue, and profits will be held in reserve without their existence being disclosed by the current financial reports.

Badwill.

In the case of the purchase of a concern, or more particularly, where a number of firms have consolidated and where certain of those taken over have not made a sufficient profit to pay for the use of the capital involved in conducting the business, an equivalent reduction must be made in the purchase price. This, then, in contra-distinction to Goodwill, is Badwill and should offset the Goodwill value taken over with the other concerns. Instead of giving effect to such an account, however, it is usual to accept the minimum rate earned by either of the companies, as the basis of computations and to distribute common stock to the other companies of an amount equal to the capitalized value of their earnings which are in excess of the minimum earnings determined upon.

C. P. A. Questions

1. (a) Define Goodwill. (b) On what basis should Goodwill be valued? (c) On what grounds, if any, can an increase in the value of Goodwill be justified? (Wash.)

2. A company whose capital stock is $250,000.00, divided into $100,000.00 6% non-cumulative preferred shares and $150,000.00 common shares, begins its life with an excess of liabilities (including Capital) over real assets to the extent of $10,500.00, which sum is debited to Suspense Account. During the first few years small losses are made and carried forward to the Profit and Loss account, but finally sufficient profits are earned to wipe out the losses of previous years and leave a balance of $16,500.00.

The holders of the preferred stock claim that any surplus profit, after payment of the preference dividend should be used to extinguish the suspense account.

The holders of the common stock claim that all such surplus is properly available for their dividend on the ground that the original deficiency carried to the suspense account was in effect a charge to Goodwill.

Give briefly your understanding of Goodwill. State how you would deal with it in this case, and whether the directors may pay any dividend on the common stock. (Ill.)

3. When a corporation acquires a number of plants, paying a lump sum for each, is it necessary to show on the books the proportion of the purchase price paid for Goodwill, and if so, what would be the proper method of ascertaining and expressing such proportion in the accounts? (N. Y.)

4. Under what circumstances, if any, is it in your judgment permissible to increase or decrease the book value of Goodwill? (Wash.)

5. In the case of a consolidation of three manufacturing concerns, how would you determine the Goodwill of the consolidated company? (Ill.)

6. Under what circumstances is it necessary to open a Goodwill account? What advantages are there in allowing it to remain open indefinitely on the books? (Ill.)

7. A merchant, who has been in business for twenty years, decides to put a valuation on the Goodwill of his business and carry same as an asset on his ledger, the entry being to charge Goodwill and credit Surplus. Another merchant five years later buys the entire business, including the Goodwill, and after making a careful inventory finds that the actual net resources exclusive of Goodwill, amount to $5,000.00 less than the sum he paid for it. Discuss the subject of Goodwill in respect to the above case, and state the correct manner of dealing with same. (Ill.)

8. In auditing the books of a corporation capitalized at $250,000 you find that three years previously they acquired the business of a co-partnership included in which was an asset called Goodwill, valued at that time at $25,000, since which the same has not been written down. The average profits of the corporation for the three years have been nine per cent on the capitalization. How would you treat the item Goodwill? Give reasons. (N. Y.)

9. In making an audit of a firm's books for the purpose of certifying its annual profits for a period of years and with a view to its conversion into a corporation, what items of earnings and expenses should be omitted

which ordinarily would be properly included in its regular annual profit and loss account? (N. Y.)

10. Is Goodwill a fixed or floating asset? Why? (N. Y.)

11. A firm resolves itself into a corporation in which new capital is interested. How would the auditor ascertain the value of Goodwill? (N. Y.)

12. The books of the Mapes & Manning Company, manufacturers of and dealers in farm implements, show for the past five years net profits as follows: 1906, $177,000; 1907, $143,000; 1908, $206,000; 1909, $16,000; 1910, $98,000.

You are instructed by a banking syndicate to examine the accounts of the company and report upon the profits during the above period. In the course of your examination you ascertain the following fact: Current Liabilities were not taken into the accounts as follows: Jan. 1, 1906, for new buildings, $42,000; accrued wages, $5,300; Dec. 31, 1906, repair charges, $2,600; accrued wages, $2,900; Dec. 31, 1908, merchandise invoices, $6,800; current expenses, $5,400; Dec. 31, 1910, accrued wages, $3,200; materials and supplies, $4,600; shop equipment, $8,400.

On Dec. 31, 1910 the company engaged two real estate experts to appraise the land and buildings. The lower of the two showed a present value of $587,000, and this valuation was adopted by the board of directors, who instructed the bookkeeper to charge Real Estate Account and credit Profit and Loss at the above date with the difference between the foregoing amount and the book figures of $560,000.

A mortgage of $200,000, bearing 5% remained upon the property during the whole of the period under review,

and interest on this mortgage was charged before arriving at the book profits.

Satisfactory provision was made in each year for depreciation of buildings, machinery, etc.

Revise the profits for each year in accordance with the above fact. (Penn.)

13. Goodwill for a large amount appears amongst the assets of the Barchester Brewery Company, Ltd., a company formed during the brewery "Boom." The profits of the company have gradually decreased during the past few years, and, in the years ending June 30th, 1908 and 1909, while the dividend was paid on the preference shares, no profits were available for dividends on the ordinary shares. The balance at the credit of the Profit and Loss account for the year ended June 30, 1910, was sufficient (after satisfying the preference shareholders) to pay a dividend of 2½% on the ordinary shares. The directors were divided in opinion as to whether a dividend should be declared or the amount taken to the credit of the Goodwill account. As auditor to the company you were called in to advise the directors. State briefly the views you would have submitted to the board. (Inst. of C. A.)

14. A new corporation, "D," is formed to purchase and amalgamate the business of three corporations, "A", "B" and "C" carrying on the same class of business, at December 31, 1908.

There are considerable differences between the capitals, the gross sales, the expenses and the net profits of the three corporations. The amount to be allotted to each in shares of the new company for its capital and goodwill is agreed to be referred to you.

Prepare a statement setting forth what you consider to be an equitable apportionment of the stock of the new concern.

For the purpose of class uniformity, use the following figures:

	"A"	"B"	"C"
Capital	$ 60,000.00	$120,000.00	$180,000.00
Surplus	30,000.00	40,000.00	45,000.00
Average Annual Net Earnings	15,000.00	9,600.00	10,800.00

(Adapted from Illinois.)

CHAPTER XV

Liabilities

The accounts representing the liabilities of a concern are, if they appear in the books at all, seldom incorrectly stated. There is, of course, a possibility that, in preparing statements showing the financial condition of the concern, a like amount of assets and liabilities may be omitted as being offsets to each other, and the status of the concern be misrepresented to that extent, as in case of the purchase of some particular asset on installments, the equity possessed by the firm, only, being shown, while the existing liability on the balance of the contract may be omitted entirely as an offset to the equity possessed by the vendor.

Contingent Liabilities.

There are a considerable number of transactions that occur in regular business, the effect of which is not fully realized at the time the transaction occurs and, as a result, no attempt is made to record them in the books. This refers particularly to liabilities which are incurred but which may or may not become a claim, contingent upon the happening of some event. As an example, take the case of a note that has been charged to the Bills Receivable Account. If it is discounted, the usual entry is to credit Bills Receivable and debit Cash and Bank Discount. This entry immediately removes the note from the account and no effect is given the possibility of the note being eventually dishonored and becoming a claim against the business. The proper entry is to debit Cash and Bank

Discount and Credit Bills Receivable Discounted, then when the note matures and the liability is found non-existent, the two accounts can be adjusted.

Notes are often given, guaranteed or endorsed, for the accommodation of other persons, in which case, the persons accommodated should be charged with its amount and Bills Payable credited, or, if the notes are exchanged the entry would be Bills Receivable Dr. to Bills Payable.

Cumulative Preferred Dividends in arrears are another form of Contingent Liability, differing from Bills Receivable Discounted in that, as between the company and the preferred stockholder, no liability exists until such time as a sufficient profit has been earned to warrant the declaration of the dividend, but, from the standpoint of the holders of inferior stocks, a liability exists in that the Cumulative Preferred Dividends in arrears must be paid before anything can be paid on their stock. This item should not be included in the books of the company but should appear appended to the Balance Sheet as a footnote.

The liability on Guaranteed Goods or similar existing contracts should, if there is any possibility of it becoming a claim of any great proportions, be given effect, either by setting aside a portion of the revenue and including the item in the accounts proper or by appending a footnote to the Balance Sheet—the former method preferred.

Suits pending in the courts should also be given due consideration.

Capital Liabilities—Bonds Payable.

Considerable doubt exists in the minds of students, as to the advisability of placing bonds on the books that have been authorized but not yet issued. Much of the confusion arising, no doubt, from the different views entertained by the various accountants who have ex-

pressed themselves on the subject—certain of them having given preference to showing the entire authorized issue on the books and the unissued in an offset account,—treating bonds the same as they would stock,—and others favoring the placing of them on the books only as they are sold, depending upon some auxiliary record such as a Bond Register for the details of the issue.

The difference in the principles involved between the entries covering the stock and the bonds is very slight, possibly not enough to warrant a different treatment of the items, but, as from an accounting standpoint, the trouble seems to lie wholly in the accepted manner of caring for stock, there seems to be no valid reason for treating bonds in the same manner.

No liability, whatsoever, is incurred until the bonds are sold and, as an auxiliary record is necessary in any case, to contain the volume of information required in connection with the issue, we prefer to only show the bonds as they are actually sold.

In connection with certain examination problems, it is sometimes required that certain bonds be set aside as treasury bonds for future disposition; such a requirement we believe infers that, from the examiners' viewpoint, it is better to treat the bonds the same as stock and in solving the problem it is desirable to give effect to an Unissued or Reserved Bonds Account.

Premium or Discount on the issue should be set aside in a subsidiary account to adjust future interest payments.

The facts that bonds have been certified by a Trust Company does not, in any way, affect the liability of the company or require any entries in the books; the certification being only for the benefit of the purchasers, to assure them that the authorized issue is not exceeded.

Bonds that have been taken over by an underwriter are, in fact, sold and should appear accordingly in the books.

Capital Liabilities—Proprietorship.

The principal features in connection with the accounts representing the proprietorship have already been dealt with in Chapter IV; we wish to add, however, a few words relative to corporation accounts.

The authorized amount of Capital Stock of a concern is, in general, placed on the books and the amount unissued is entered as Unissued or Reserved Stock, the latter accounts being adjusted from time to time as the stock is issued.

If the stock is divided into shares possessing different privileges, separate accounts should be opened for each portion designating them as "Common Stock," "Preferred Stock," "Cumulative Preferred Stock," "Preferred Stock, Unissued," etc.

The profits arising are transferred to the credit of "Undivided Profits Account," and later, upon the declaration of a dividend or other action of the directors, to Dividends Payable Account, or, if the profits are to be used for some other purpose, to an account displaying the eventual disposition of the profits as "Reserve for Contingencies" or "Reserve for Extensions." It profits are retained in the business instead of being distributed and if the respective rights of different classes of stockholders are thereby disturbed the amounts reserved should be specifically marked so when it is distributed it will go to that stock which was entitled to the profits in the first place.

The Surplus account is often used to include undivided profits but, as it is also used to include contributions

made by stockholders in addition to the par value of their stock, as in the case of the organization of a bank where a premium is paid on the subscription; or to include the excess of assets remaining after the Capital Stock has been reduced without a return of such excess to the stockholders, it is deemed better to use the "Undivided Profits" account to the exclusion of the other where profits are concerned.

Adjustments are often made in one year which should have been made in prior years and it is often contended that such adjustments should be given effect in the current year's operations and not through the Surplus or Undivided Profits accounts, as we have recommended from time to time. The arguments advanced in favor of such action is that if the item is not given effect as against the current year's operations, statements of operations will never disclose the item.

It appears to us that simply because one year's records are incorrect there is no logical excuse for improperly stating the effect of the efforts of some other year, and that the adjustments should be made through Undivided Profits or Surplus account, as these accounts are all that remain of the past year's results.

By having all such items specifically stated in these accounts, the work of preparing accurate statements of past results is greatly simplified.

The plan the writer usually takes in making adjustments of this sort is to make them through an account headed, say, "1904 Profit and Loss Adjustment Account," which account, in turn would be closed into the Undivided Profits account.

C. P. A. Questions

1. In a case where the preferred shares of a company are issued under a provision that the annual dividends to which they shall be entitled shall be "cumulative," would you consider it necessary to show any arrears of dividend as a Liability upon the Balance Sheet, or how would you deal with it? (Ill.)

2. What is a contingent liability? For what purpose and in what form should such liabilities appear in a statement of financial condition? (Mass.)

3. Give at least two examples of contingent liabilities and state how they should be treated in the books. (Fla.)

4. A corporation authorizes an issue of $1,000,000.00 of bonds. The trust company issues and certifies $500,000.00 of these bonds to Dec. 31, 1907. On this date the company sells $200,000.00 of bonds, pledges $200,000.00 as collateral security for the payment of its notes and has $100,000.00 in the treasury. How should this issue of bonds appear on the balance sheet of the corporation on Dec. 31, 1907? (N. Y.)

5. Do unsold bonds of a railroad company constitute a liability? If they do, under what accounts would they appear in a ledger? Does unsubscribed stock in a corporation constitute a liability? If it does, under what accounts would it appear in the ledger? (Mich.)

6. The Bristol Manufacturing Company issued and sold on the 1st of January, 1911, to "A" and "B," 100 (50 to each at the same price) First Mortgage Bonds of

$500.00 each, bearing interest at 4% per annum, and received $48,000.00 in cash.

What record of the transaction should be made? (Ill.)

7. A company takes a large number of notes (Bills Receivable) from its customers and when in need of funds, discounts or sells them. What accounts, if any, should appear to care for the contingent liability thus created? (N. Y.)

8. Distinguish between the accounts usually designated "Surplus" and "Undivided Profits" as to (a) definition, (b) treatment.

State circumstances under which it is proper to debit or credit "Surplus" account. (N. Y.)

CHAPTER XVI

Subsidiary Accounts

The principal use to which subsidiary accounts are placed is to contain items which have either been paid during one period of a company's operation and have not been used or which have accrued, as in the case of "Insurance paid in Advance" or "Bond interest accrued but not due," but have not been paid. In any case, at the time of closing the books, the amount transferred from the major account to the summary account (Profit and Loss or Trading, etc.) must represent the actual effect of the year's transactions on the account to be transferred. If the major account does not display the accurate result the account must be adjusted by the aid of a subsidiary account which, often, may be a portion of the major account and remain on the same page in the ledger, but which, for the purpose of closing the books, is subsidiary to the other account.

Insurance Paid in Advance.

To illustrate: The insurance account of a certain firm shows a balance, Dr., of $126.00. Upon checking the account, it is ascertained that the amount which properly applies to the current year's operations only amounts to $106.00, leaving a balance of $20.00 to apply against the expense of the succeeding year. In adjusting the account, $20.00 is carried forward as Unexpired Insurance and the $106.00 is carried to the Profit and Loss Account, this being the proper expense for the year. Upon opening the books for the new year the $20.00 becomes the open-

ing balance of the major account but, for the purpose of closing the books, it forms a subsidiary account.

Advertising Appropriations.

Occasionally a firm may inaugurate an extensive campaign of advertising which may exhaust the usual appropriation of a number of years and from which profits and additional business may be expected to accrue for a considerable time. In this case, it would be manifestly unfair to include in the one year the entire expenditure and, in general, a portion of the expenditure becomes a deferred charge to the operations of the next few succeeding years.

In the case of a very extensive campaign covering a number of years, it is customary to appropriate a certain sum, possibly varying with each year, which is charged, as expended, to "Special Advertising." The average expenditure of each year, during the life of the campaign or possibly including a few additional years where the effect would be felt that long, would be transferred from the special account to the current account to represent the proper portion of the expenditure chargeable against the current year's operations. The balance of the Special Advertising Account would remain as a subsidiary account representing the deferred charges against future years.

Any expenditure in excess of or not included in the appropriation would be charged to the Advertising Account direct.

Expenses Incurred in Advance of Sales.

Those firms that supply Christmas Goods, Fireworks, Clothing and similar articles, the demand for which is periodical, often incur a considerable amount of expense during one fiscal year which properly belongs to the next

period, it being directly applicable to the succeeding year's sales. There is, of course, an argument that each year's expenditures will equalize themselves, but this hardly seems proper, for one year's expense may be all out of proportion with the business done, say, in the early part of the year, and the financial statements will be inaccurate to that extent; therefore, it seems more desirable that all expenses incurred after the periodical business has ceased should be carried forward into the next year's business or, preferably, if it is possible to do so, the fiscal year should be changed so that it will expire at a proper moment to include all transactions leading up to and including a selling period.

Discount on Bonds.

Discount on Bonds sold is a prepaid expense, apportionable over the life of the bonds like the interest, and should be treated accordingly by retaining on the books from year to year such portion of the original discount as properly applies to future years.

In practice, it is frequently considered inadvisable to carry this item over a great many years, as would be necessary where the life of the bond is very great, and the account is closed on the books by charging it against Net Profits. Discount on Bonds sold cannot, properly, be considered as a charge against operations. It is, rather, an expense incidental to a deficiency of capital, therefore any statements that may be prepared, setting forth the result of operations, would not be affected even though the entire discount were closed out and, if profits were available with which to wipe out the account, no serious objection could be raised to this procedure. (See Secret Reserves.)

Expense incurred in negotiating an issue of bonds is usually capitalized, as the bond proceeds are usually used

for acquiring Capital Assets. If, however, the bond proceeds are to be used for Working Capital and a considerable sum is involved, the expenses incurred in financing the issue could properly be spread over the life of the bond the same as the Discount.

Suspense Accounts.

During the course of adjusting or closing the books or even during a period of operations, items arise which for some reason or other, cannot be analyzed sufficiently to properly place them on the books. It then becomes necessary to make such entry as is possible; throwing the unapportionable balance into a suspense account, properly headed, for future attention.

The following were used recently, when adjusting the books of a branch office, and are good examples of this style of an account:

"Spokane Bills Receivable Suspense Account"

Used where a reconciliation of the account was impossible and where records were not available to check out the entire account, but where it was necessary to give effect to the account on the books.

"Executive Office Collection Suspense Account"

Opened for a similar purpose, covering collections made by the branch for the home office and erroneously reported to them.

Such accounts should be closed at the earliest possible moment and not allowed to stand in anticipation that they will automatically close themselves.

Accrued Expenses.

There are a considerable number of items, such as taxes, rent, interest, wages, etc., which accrue with the

effluxion of time, viz., each moment of time causes an increase in the amount properly chargeable to these accounts and, owing to the fact that the increase is continuous, it becomes impossible to record it as it accrues. The usual procedure is to pay them as they become due, charging the amount paid to the respective accounts and then, whenever it becomes necessary to close the books and determine the profits for a period or the status of a concern as at the end of a period, the amount that has accrued during the year is transferred to Revenue, irrespective of what the account balance shows. The amount remaining forms a subsidiary account for Balance Sheet purposes and would appear therein under an appropriate heading, such as Taxes Accrued and Unpaid, etc.

The subsidiary account may form the nucleus of the major account upon opening the books for the new period.

Premium on Bonds.

The premium on an issue of bonds sold, like the discount, should be set aside to adjust future interest payments.

In connection with the issue of bonds, attention is directed to the manner of paying interest on each bond.

In general, interest is payable semi-annually and if a bond is disposed of at any time between the interest dates, it carries with it, the interest that has accrued since the last interest date; therefore, if a bond were sold at a premium or a discount at any time between the two interest dates and if no provision was made at the time of sale for the interest that had accrued, consideration would have to be given the accrued interest in determining the actual premium or discount. The amount of interest that was sold with the bond should be credited to

Bond Interest Account to offset a portion of the amount that would be paid on the next interest date.

Premium on Stock.

In the organization of double liability corporations such as banks, etc., and also in the case of industrial concerns where the stock has been increased, it is not unusual to have the stock issued at a premium.

In either case, there is no legal objection to crediting the premium to Undivided Profits Account and repaying it to the stockholders as a dividend except in cases where a certain surplus is required by law in addition to the Capital Stock. In general, however, the premium is credited to a "Premium on Capital Stock" account which is intended to remain on the books as a surplus not available for dividends.

In the case of the new organization, the reasons for issuing the stock at a premium are usually to provide the Surplus required or to secure desired Working Capital with a minimum of Capital Stock. The object of so doing being to limit as much as possible the liability existing under the double liability clause of the various special incorporation laws.

Where a concern has increased its Capital Stock and has issued the new stock at a premium, the company does not directly profit by the transaction, for any premium received would still be the property of the stockholders; the company simply having the use of it during the period it remains in their hands.

The objects to be secured by the issue of stock in this manner are to equalize the value of the old stock and the selling price of the new and to provide the desired working capital with as small an increase of the dividend bearing stock as possible, thereby enabling the company to

pay a satisfactory rate of dividend on the stock outstanding with a lesser sum than would be required were a greater amount of stock distributed.

If the new stock were issued as outlined above, the new stockholders would receive, at some date, more or less removed, pro rata with the old, a portion of the premium that they had paid into the company and, to avoid this, it is customary to grant to the old stockholders, proportionate to their holdings, the right to subscribe for the new stock at par. This right is transferable and, if the stockholder does not care to use it himself, he may sell it to some other party who pays him the value of the premium and the company the par value of the stock.

In general, the holders of an original issue of stock, provided it is not to be exchanged for property, have a prior right to subscribe for any new stock and they cannot be called upon to pay more than par therefor.

Premium on the sale of Treasury Stock is usually closed into "Undivided Profits" direct, but Discount on Treasury Stock is generally considered as an offset to "Donations" or whichever account received credit at the time the Treasury Stock was placed on the books.

C. P. A. Questions

1. Would you consider it proper to include as an asset the following items: Insurance premium unearned, taxes paid in advance, advertising expense? Explain briefly and give reasons. (N. Y.)

2. A firm expends considerable sums upon advertisements in order to form a business. Assuming that the expenditure thereon decreases annually until, in the seventh year, it reaches a point representing a normal annual cost under this head, how would you expect the amounts to be treated in the books? In your reply let $14,000.00 be the expenditure of the first year and decrease $2,000.00 annually. (Adapted from D. A. A.)

3. A railway company sells on Oct. 1, 1900, an issue of 5% 20 year bonds dated Sept. 1, 1900, at 110 flat. How should the premium received be treated on the books of the company? (N. Y.)

4. Explain what is meant by suspense, prepaid and accrued accounts, and give examples of each, showing proper classification as to debits and credits. (Adapted from Mich.)

5. From the standpoint of a corporation which requires additional capital, would it be preferable to issue the new stock at par pro rata to the old stockholders or should it be sold in the open market at the highest price obtainable. (XXX.)

6. What portion of $15,000—commission paid for negotiating a sale of bonds to run 10 years—should be treated as an asset at the end of the first year? Give reasons. (N. Y.)

7. A company receives a premium on its own capital stock. What account should receive credit for the premium? Is this premium available for the payment of dividends? Give reasons to sustain your answer. (N. Y.)

8. How should the discount and premium arising from the sale of a company's own securities held in its treasury be treated on the books? Give examples. (N. Y.)

9. Outline an entry recording bond interest due but not paid at time of making the entry. What are the advantages of such an entry? (N. Y.)

10. Mention other items which could be treated in a similar way to that suggested for interest in the previous question and state the advantages of such treatment. (N. Y.)

11. Illustrate in the form of journal entries the accrual of discount and the amortization of the premium on bond investments. Explain or illustrate the relation of each to the interest receipts and to the income returns. (N. Y.)

CHAPTER XVII

Reserves

In taking up the discussion of Reserves, we must admit that, considering the object of this work in connection with outlining the principles of accounting with a view of assisting the student in satisfying the various State Boards of Accountancy, we are entering it with some hesitancy due to the great divergence of opinion that exist not only amongst the authorities on accounting but the examiners as well; and no matter what views may be mentioned we assuredly would differ from the majority of those who have expressed themselves on the subject and also those who have the future of the student in their hands as members of the various examining boards. It behooves us, then to follow out the principles as they appeal to us irrespective of what may have been written in the past, in the hopes that through this work, some of the uncertainty of the subject will be eliminated and the student will feel more confident that his views do not conflict with those of his judges when he enters the examination room.

The principal trouble seems to lie in the failure to distinguish between the source of the various items which go to make up the Reserves. Some of them represent charges to the Revenue Account while others are created by charging Undivided Profits or Surplus.

Those that originate in the Revenue Account invariably represent the estimate of loss or expense that has occurred, as distinguished from the actual expenditure that has been made to replace that loss, or loss that has required attention during the year. To illustrate: In a

given year the manager of a concern estimates that the proportion of loss through bad debts which is properly chargeable to that year, will be $500.00. Possibly an analysis of the ledger will not disclose bad accounts representing anywhere near that sum and but few more that are doubtful, but experience has taught that, in conducting any business, losses through undesirable credit will surely result and, in correctly stating the account for any period, it becomes necessary to reserve a portion of the Revenue of that year to provide for the proportion of the sales that are to undesirable customers. The reserve provided is supposed to cover all losses that occur even though at the time the reserve was made accounts were thought to be good which later proved to be bad and, as losses occur, they are charged against the reserve instead of against revenue to which they would have to be charged had no provision been made in previous years to care for them.

Those charges that originate in the Undivided Profits Account represent profits that have been set aside for some purpose; possibly to retain in the business, a sum with which to make extensions, which, without the Reserve would require a new issue of stock or an issue of bonds. The fact that these profits have been ear-marked and separated from the others does not affect their availability for any other purpose that may arise and which may appear to be more important than the one for which the account was originally opened; provided, of course, that there is no existing obligation covering the operation of the account.

The former is known as a Reserve Account and the latter as a Reserve Fund. The first represents the estimated loss incurred through some channel and is intended to be closed out as soon as the actual expenditure is de-

termined. The other represents profits, changed in purpose but not in form.

To summarize: A Reserve Account represents the provision made for a known but inestimable loss that has occurred and is to be provided for out of revenue awaiting the final ascertainment of the loss. A Reserve Fund represents profits that have been set aside to provide for some expenditure the requirement of which may be either certain or a contingency.

Excessive losses, greater than the amount of Undivided Profits, must act as a reduction of the Reserve Fund but they would have no effect on the Reserve Account for it already represents similar items, the effect of which has been provided for.

In the preparation of Balance Sheets or other reports covering the status of the accounts, the Reserve Account becomes an offset to its Major Account, if the Major Account appears in the books, and is shown in the report as a deduction from it; the Reserve Fund is invariably an adjunct to Surplus Account and should appear as such.

Reserve Accounts.

Reserve accounts may be provided for almost any purpose; the principal ones are in connection with the loss through bad debts, depreciation and deterioration of stock.

The advantages derived by providing them are that losses may be provided for on a number of objects as a group without affecting the individual items of the group or the total thereof, and that the cost of articles may remain on the books for use in the adjustment of fire losses, etc.

Before going further in their discussion, we wish to make clear the manner of placing the items on the books.

As an example, let us refer to the illustration just used relative to the loss incurred in a certain firm through bad debts. From past experience they have ascertained that the probable loss in this particular year will be approximately $500.00; they wish to give this effect without interfering with the accounts and make the entry:

Profit & Loss (Trading)	$500.00	
Reserve for Bad Debts		$500.00

To provide for possible loss through bad debts.

In a short time it is decided that a certain account is hopeless and should be eliminated from the ledger; the entry

Reserve for Bad Debts	$100.00	
John Doe		$100.00

To close the latter account.

is then made, closing out the John Doe account and reducing the reserve. Should the reserve account become entirely wiped out through losses that were not anticipated, the excess of losses should be closed into Profit and Loss, and not charged to the reserve.

Reserve for Bad Debts.

In estimating the amount that should be provided to cover the loss through bad debts, it is customary to build up the reserve so that it is equal to approximately 2% of the accounts outstanding as displayed by the books. This plan is fallacious in that, if a considerable number of accounts are closed out during any one year, it may entirely wipe out the Reserve Account, with the result that that year will have to provide for its entire rebuilding; whereas, if but few accounts are closed out, but a small additional amount will be required to bring

the account back to its required amount. In practice it virtually amounts to charging the losses as they are determined direct to Profit and Loss and then adjusting the Reserve Account, at the end of each period, proportionate to the amount of accounts outstanding at that time.

Where this plan is used, often a loss is not anticipated on the Bills Receivable Account. Losses undoubtedly result through the non-payment of notes and such losses should be provided for.

Frequently the accounts are not analyzed to determine if the reserve is sufficient to cover, as it should, not only those debts that are known to be bad, but also a sufficient proportion of those supposed to be good; the tendency being to let the 2% suffice, thereby misrepresenting the accounts.

The more desirable plan seems to be to set aside at desirable intervals a proportion, say 1% or less of the sales that have occurred during the period under review. This has the decided advantage of placing the loss where it belongs—as a charge against the sales—and of spreading the loss proportionately over each period and upon every article sold. The loss actually occurred at the time of sale and should be entered during that period. If a note should eventually be taken its probable loss would have already been cared for and would require no additional attention.

If at some future date, it is found that the rate used is incorrect the Reserve Account could be adjusted through the Undivided Profits or Surplus Account and the rate could be corrected for future use.

Reserve for Cash Discount.

Cash Discount, we believe, relates to the period in which it is granted or taken, hence no provision need be

made in one year to protect it against the succeeding year.

If a discount is allowed in one year, that year has the use of the money and should stand the discount.

Reserve for Depreciation.

In connection with either the plan of writing off a proportion of the original purchase price of an article or that of writing off a certain percentage of its original cost, it is desirable to set aside in a Reserve Account the amount that has been determined upon as the proper depreciation, so that the Asset Account will continue to show the actual cost of the articles purchased. In the former case it is particularly desirable that the original purchase price remain on the books and in the latter the book value can easily be ascertained by deducting the amount of the subsidiary account from that of the major account.

The amount that has been provided should be charged with all expenditures, which it is intended to cover, as they occur. It should not be charged with any items, provision for which has not been made and included in the account. Repairs caused by accident, assuredly should not be included in the account; they should be charged direct to an expense account of some sort. Neither should Replacements, for they are, in effect, the purchase of new articles, and should be charged direct to the Asset Account. The article which they replace should be deducted from the Asset Account and the Reserve Account should be reduced by the amount of depreciation it contains, which refers to that particular asset. Should the amount not be sufficient to cover the depreciation that has now been ascertained, the balance should be written off out of Undivided Profits Account.

It will be noticed, here, that as we have outlined a

Reserve for Depreciation, it is intended to include certain sums for each particular class of anticipated loss. Undoubtedly it would be easier to consider the reserve as a provision for whatever may occur, irrespective of the amount that has been provided for certain contingencies, but, so long as the reserve is but an estimate and also as it includes various estimates on particular objects and covering particular losses, would it not be better, if it is possible to do so, to adjust each loss as it is ascertained with the provision that has been made for that loss? As an example: Let us take the case of a machine costing $1,000.00 and depreciated at the rate of 10% on reducing balances. In five years the book value of that particular machine will be $590.50. Let us presume that it becomes necessary to dispose of it and to replace it with a new and better article and that the amount obtained from it is but $300.00. To adjust the accounts, we should reduce the asset account by the amount of its purchase price, $1,000.00. We would then, under one plan—the incorrect one—charge the Reserve Account with the loss $700.00 or, under the other plan, with the amount it contains that represents the anticipated depreciation, viz., $409.50. The balance of $290.50 represents, undoubtedly a loss that has not been provided for and this loss, now that it has been ascertained, should be charged direct to Undivided Profits Account as effecting previous years.

In the former case, the Reserve Account would be charged with a loss which it had not been provided for and, hence, owing to the reduction, it would not be sufficient provision for the anticipated loss on other articles.

The loss that has been provided for, in connection with any particular article, can be easily determined, its cost and the rate of depreciation being known; so what

excuse is there for not correctly stating the loss in the books after it has been determined?

During the first few years of an article's use, the amount expended to renew worn parts will be necessarily small but the wear that has been applied during this period is proportionately liable for the eventual expenditure and the year should be charged with its proportion. An estimate of the probable wear should be made and should be charged against the current year's operation and credited either to the Reserve for Depreciation Account or, if desired, to an account headed "Reserve for Renewals," then as renewals are made the Reserve for Renewals could be charged with the expenditure.

The advantage of separating the items into Reserve for Renewals and Reserve for Depreciation lies in that the different elements of depreciation are separated and neither of the reserves could become exhausted at the expense of the other without the fact being known.

Losses on small tools, as ascertained, are usually charged directly against operations, during the period that the loss is determined; therefore no provision need be made in the nature of a reserve for this class of loss.

Reserve for Fire Loss.

A great number of firms, owing to the scope of their business and the fact that it is widely scattered, are able to assume the risk of loss through fire, except, possibly in their factory or some of their most important branches, and, instead of paying out considerable sums annually for insurance, they insure the property themselves by charging Profit and Loss, possibly through each branch, with such a sum as would have been paid out in premiums had the property been insured by outsiders, and crediting this amount to an account headed "Re-

serve for Fire Losses." As losses occur they are written off against the reserve. Should the reserve prove insufficient the additional losses must be cared for out of profits. Under no condition should they be allowed to remain on the books in the hopes that future reserves will be sufficient to wipe out the old loss and also to provide for such additional losses as occur.

If the condition of the business is such that it could possibly be crippled by a loss, it is undoubtedly better to place the insurance outside of the business; if, however, it is decided to carry the insurance in the business, a sum should be invested outside of the business, in some form that would allow immediate realization to equal the amount of the Reserve. If a loss occurs the securities could be converted into Cash, thereby allowing the immediate replacement of the loss. Any loss that occurs could, after it has been ascertained, be charged against the reserve.

If, after operating a considerable number of years, it is found that the Reserve is out of proportion with the amount of loss that could reasonably be expected through fire, the Reserve may be written down slightly and a profit assumed through the operation of the account. This profit, would, however, be a direct credit to Undivided Profits Account and should not disturb the statements showing the current operation of the business, neither should the annual charge for insurance be interfered with so long as it represents, approximately, the amount that would have to be paid out as insurance premiums.

Reserve for Deterioration of Stock.

The custom of inventorying old or not readily saleable stock at some arbitrary figure is to be regretted, for, no matter how conservative the appraiser might be, the appraisal from year to year will assuredly vary and

will have a considerable effect on the amount of profit ascertained. Possibly in one year, the goods may be considered worthless and be omitted from the inventory and in the next year, due possibly to a lack of knowledge on the part of the party making the inventory, they may appear at full value or nearly so, with the result that the porportion of profit to turnover will be disturbed, proportionate to the amount involved.

The better plan seems to be, as outlined in Chapter VIII, to inventory the goods at cost as long as they are included in the regular stock and to set up a reserve to cover their decrease in value by charging Revenue and crediting Reserve for Deterioration of Stock. The Reserve Account to be adjusted from year to year in accordance with the possible loss anticipated.

Should any of the goods be sold at a reduced price, the Inventory Account should receive credit for the cost price and the difference between that and the realized price should be charged to the Reserve; but should the goods be sold at a sum in excess of the cost price but still with an allowance for deterioration, the Sales Account should not be disturbed by the sale, for it does not carry the proper proportion of profit; instead the excess of selling price over cost should be credited to "Profit on the sale of Deteriorated Stock" and the balance credited to the Inventory Account.

Reserve for Damages to Leased Property.

In connection with leases, there is often provision made covering the replacing of property in its original condition and some provision must be made during the life of the lease to provide for this loss.

An amount should be set aside from Revenue during each year of the life of the lease, if the damages may

be presumed to accrue during the entire period, or during the last few years if their nature is such that this procedure appears proper. If no provision is made during the early years of the lease and if the damages may be traced to that period, Surplus should be charged with the amount apportionable to those years.

Reserve Funds.

In connection with Reserves the use of the word "Fund" is often criticised on the assumption that a Fund must be Cash and an asset, whereas it is used as a credit representing an assumed liability. The same argument might equally well be applied to the word "Reserves" in that a reserve must be something substantial and in possession, in which case it must be an asset, but we doubt if this objection has ever been raised. The distinction between the two is not sufficient to warrant that the entire discussion should revert to the one word to the exclusion of the other.

Immediately that it is desired to establish a trust in connection with some particular undertaking and that trust is established, it becomes necessary to give effect to that trust. This can only be accomplished by giving the trust credit for such sum as is believed proper and, provided that the trust is our trust and the amount it contains is to be held in reserve, we must call it a "Reserve;" also, as it represents resources to the credit of that Reserve we may call it a "Fund" for a fund need not necessarily be cash. It may be of wisdom or of good sense or anything else of value.

The fact that the amount designated is a credit balance is no objection to the use of the term "Fund," neither does its use in connection with a credit balance restrict its use to that side only. It applies equally well to things in possession and may appear as an asset.

A Reserve Fund may be created for almost any purpose for which the profits that would have been distributed as dividends could be used. Its principal value lies in reserving in the business sums with which to build up and strengthen it, to pay off existing obligations, or to equalize dividends. If the reserve is to be of a permanent nature—say to provide permanent Working Capital, it should be specially headed so that it will never be looked upon as available for dividends.

It is also used in connection with profits arising through exceptional sources as from the sale of stock at a premium or the sale of real estate. In general, such profits are set aside in reserve for exceptional losses instead of being declared as a dividend. There is, of course, no objection to using such a reserve, or for that matter, any Reserve Fund that is not affected by existing obligations, for any other purpose that may appear desirable.

The entry required to set a reserve fund on the books comprises a charge to Undivided Profits Account and a credit to some account designating the purpose of the fund, say, "Reserve Fund to Provide for Extensions," or "Reserve Fund for Contingencies," or where a Reserve Fund is being set up on the books to represent an anticipated profit the actual attainment of which is in the future, as in the case where a fixed asset has appreciated but where its sale has not been consummated, the entry would be

Property or Fixed Assets	X	
Special Reserve Fund created by appreciation of Fixed Assets, not available for dividends		X
To give effect to a known appreciation in property.		

The use of the term "Fund" is often omitted, even in connection with items which undoubtedly arise from

profits. But where the importance of discriminating between the two classes of items is so great, it appears that considerable stress should be laid upon the character of each reserve and this can be best accomplished by labeling them in every case.

Secret Reserves.

A Secret or Hidden Reserve represents an accumulation of profits which is not given effect on the books.

The excess of actual profits over those given effect constitutes the Secret Reserve.

The method we have outlined in connection with the valuation of inventories, particularly those relating to investments that have a readily determinable realization value, creates to a certain degree a Secret Reserve. This, however, is but a conservative estimate of profit, whereas in general, a Secret Reserve may be construed to mean an arbitrary reduction of actually realized profits.

The purpose of a Secret Reserve usually is to retain in the business sums, which, if they appeared on the books would be demanded as dividends or, in the case of public service corporations, to make the profits appear but normal in proportion to the capital involved, so that the public will not feel that the charges for services are in excess of what they should be or that the profits are the result of a monopoly rather than of service, and, in the case of the majority of corporations, to escape taxation.

The usual mode of procedure in building up a Secret Reserve is to make exceptionally large charges against Revenue to cover anticipated losses, such as depreciation, bad debts, etc., to charge it with expenses as they occur but which have already been provided for in the Reserve Account, or with purchases which should properly be capitalized, by writing off Goodwill or Organization Expenses, or by undervaluing inventories. It might also

be accomplished by giving effect to liabilities that do not exist but we believe this practice is very unusual.

The advantages of a Secret Reserve are that, in the case of a business whose profits are fluctuating, a normal rate of increase may be shown, exceptional losses may be endured without an apparent effect on the stability of the concern, the business may be strengthened and, where additional capital is required, but where the tendency of the stockholders is to demand all surplus earnings as dividends, it may be secured.

Its disadvantages are that the accounts and reports do not show the proper status of the business; an estimate of valuation based on reports must be inaccurate and may be used fraudulently by those in possession of a knowledge of the true state of affairs; losses due to speculation or mismanagement may be concealed and assets that have been fraudulently disposed of may be entirely erased from the books. When the amount of the reserve is given effect for any purpose by placing it on the books it may be exaggerated with a consequent inflation of proprietorship and of profits or, where it is created or adjusted by tampering with inventories, the true proportion of profits cannot be ascertained.

The propriety of creating a Secret Reserve seems to us to be well answered in the preceding paragraphs for, surely, no practice which has so few good points should be looked upon with favor where there are so many questionable features. Still, in justice to the practice, we must admit that the policy of the largest and most conservative institutions in the country favor it and, so long as the object of the reserve is good and the good intent is conscientiously followed and also that it appears necessary in the interest of the business, there is a possibility that the end justifies the means.

C. P. A. Questions

1. Do you consider there is any distinction between "Reserve Fund" and "Reserve Account?" What are your reasons? (Ill.)

2. What is your understanding of the term "Reserve for Doubtful Debts," and how would you establish it upon the ledger? (Ill.)

3. How would you suggest that a trading or manufacturing concern should make provision for known or uncertain losses through bad debts? (XXX.)

4. A concern owning a fleet of twenty vessels decides to carry their own insurance. How will this be dealt with on their books and at the close of each fiscal year? (Ill.)

5. An old established and highly prosperous business is transferred in 1900 to a company which pays the proprietors $300,000 for all fixed assets and $50,000 for Goodwill. In 1909 the company has accumulated $125,000 of undivided profits and the directors decide to charge off the entire item of Goodwill. What effect will this have upon the accounts? (Ill.)

6. Corporation "X" makes a practice of charging to expense and carrying to depreciation reserve account every half year a certain percentage of the book value of its plant and machinery. What, in your opinion, is the correct method of dealing in this case with Repairs and Renewals; i. e., should the latter be charged to Profit and Loss, or can they properly be charged to Depreciation Reserve Account? Give reasons for your answer. (Wash.)

7. What do you consider the best way of entering on the books of a manufacturing company the amount

written off to profit and loss for depreciation of (a) buildings, (b) large or fixed tools, (c) small or expense tools? (N. Y.)

8. Name the advantages or disadvantages of the following two methods of bringing on to the books of a company the depreciation of its machinery:

(a) Crediting Machinery Account with ten per cent of the balance of the account each year and charging Profit and Loss.

(b) Crediting a Reserve for Machinery Depreciation with ten per cent of the balance of the account each year and charging Profit and Loss. (Ill.)

9. In reviewing the schedules of open customers' accounts receivable for the purpose of setting up a reserve against irrecoverable amounts, how would you proceed? (Ill.)

10. A firm of brickmakers, under the terms of their 20 years' lease, agree that at the close of the term they will level the ground, cover it with soil and generally restore it to previous conditions for agricultural purposes.

(a) How would you deal with this liability in the accounts of the firm?

(b) Assume 5 years of term have expired and none of the work done and no provision made. How would you adjust matters at this date? (Penn.)

11. Give your views as to the better way of carrying property accounts in a manufacturing business, whether at cost or value. Give also the manner of treating depreciation under each method. (Ill.)

12. You are employed to audit the accounts of the Utility Mills and find that the machinery after having been regularly depreciated for a number of years has been

valued by an independent appraiser at a sum considerably in excess of the book value, and the company has appreciated the machinery item in the balance sheet by such increased value. How would you suggest that the corresponding credit should be dealt with? Would such appreciation be available for distribution in the shape of a dividend? (Ill.) See Chapter XIII.

13. On an independent appraisal being made of the machinery and tools of an engineering business, of which you are auditor, it is found that the appraised valuation is in excess of the book valuation. It is desired to set up the appraised valuation on the books. How should this be done?

NOTE.—In this question the term "book valuation" is to be understood as meaning the balance of the Machinery and Tools Account, less the balance to the credit of Depreciation Reserve Account—a provision for depreciation having been made annually and credited to the latter. (Wash.)

14. In three successive fiscal years a manufacturing corporation values its supplies, etc., in hand at cost, with deduction for deterioration as follows: At end of first year 5%; at end of second year 10%; at end of third year 15%. With the inventory taken on this basis the profit for the second year did not equal the dividends declared and surplus was intrenched upon; in the third year the dividend paid was so much in excess of profits that the surplus was entirely exhausted and a debit balance created in the profit and loss account.

In auditing the books, how would you treat the above condition in your report? (Penn.)

15. What do you understand by the term "secret" or "hidden" reserves? Mention four bona fide uses of a

secret reserve and state your opinion as to the propriety or otherwise of the creation of such reserves, giving reasons. (Mich.)

16. Is there any reason why the Goodwill carried as an asset on the books of a growing and prosperous manufacturing concern should be depreciated, amortized, or otherwise written off, and if so what would be the effect of such depreciation, amortization or writing off? (N. Y.)

17. Name two ways in which such a reserve (Secret) may be created and suggest a purpose for such creation. (Wash.)

18. What are "Hidden Reserves?" Express your opinion on their soundness or otherwise from the viewpoint of a shareholder, a director, and the auditor of a company respectively? (Ill.)

19. State the different ways of creating a Secret Reserve, and also the extent to which you consider it permissible. (XXX.)

20. On an independent appraisement being made of the physical assets of a manufacturing corporation, the appraisement shows appreciations and depreciations, as compared with book values, as follows:

Real Estate, Appreciation	$20,000.00
Buildings, Depreciation	3,000.00
Machinery, Depreciation	2,500.00
Tools, Depreciation	3,000.00

The directors desire to bring the book values into agreement with the appraisement. Draft entries to show how, in your opinion, this should be done. (Wash.)

21. What, in your opinion, would be the proper record for a business corporation to make of an appropriation from its surplus profits for the amount of a permanent investment in property? (N. Y.)

22. It is agreed by the directors of a manufacturing company that certain depreciation should be allowed, but that it is desirable to let the plant account stand on the books at cost value. How would you as auditor manage to meet the situation? (N. Y.)

23. By what accounting method may regular provision be made for the cost of replacements or renewals from time to time that are not in the nature of ordinary repairs and that tend to maintain or to restore the value and efficiency of the plant? (N. Y.)

24. A public service corporation that regularly sets aside from its profits a sufficient amount to provide for depreciation, removes part of its old plant and replaces it with a larger and more costly one. The old plant is sold for scrap. How should the cost of the new plant and the proceeds from the sale of the old plant be treated in the accounts of the company? Give reasons. (N. Y.)

25. Should provision be made out of revenue to provide for discount on accounts receivable outstanding after the date of closing? Give reasons for your answer. (N. Y.)

CHAPTER XVIII

Reserve Investments

In connection with a great many lines of business it is desirable to make certain that quickly convertible assets will be available for use along a particular line at some future date; possibly in connection with the payment of a debt through which considerable loss may result if cash is not available to meet it at the time it matures; to provide against a fire loss; to assure the availability of funds to complete existing contracts; to continue operations; or, as is sometimes the case, to provide for the redemption of an issue of Preferred Stock which is possibly to be redeemed at a sum in excess of par and which it is very desirable, from the standpoint of the common stockholders, to liquidate; or, as in the case of permanent undertakings, to pay such portion of a debt that is not desired refunded at maturity.

The only way that a firm can be certain of having funds available at the time they wish them, is to set aside from time to time such sums as it can spare and invest them in such securities as will be safe and may be readily converted into cash, or to deposit them in some reliable bank.

Where such an accumulation is made by setting aside certain amounts at stated periods, it is usually considered as a Sinking Fund Investment, otherwise it is usually known as a Reserve Fund Investment. The use of the terms has not, as yet,. been sufficiently restricted in accounting terminology to warrant the assumption that the above assertion will accurately apply in all cases where

they are used, but we believe it properly restricts their use.

The investment might be operated entirely separate from any reserves if conditions were such that there was no necessity of creating reserves to replenish the working capital; or it may be operated in connection with a Reserve Account to provide for the purchase of assets to replace those that have been discarded by the business. This use, however, seems almost unwarranted except in rare cases, for it is very seldom that the assets would require replacing with such rapidity that they could not be cared for without drawing upon an investment outside of the business. The most important use covers the specific placing aside of trust funds which have already been provided out of Undivided Profits and which already appear in the books to the credit of some Reserve Fund.

The investment of the funds, in trust, in no way effects the liability to the trust; hence, the books will show the liability existing, but after an investment is made they will show further that, instead of having the trust absorbed in the business, it has been specifically provided for and removed from the business. This, then, gives us two accounts each relating to the same trust, one showing the existing liability and the other the provision that has been made for it. Each of these accounts is operated entirely separate of the other and any fluctuation or losses that may affect one, will not necessarily affect the other, viz., excessive losses may reduce or entirely erase either of the accounts but the other may still remain intact and may ultimately accomplish its purpose.

The reason for creating the fund in the first place was to retain and invest in the business certain sums which we believed represented our obligation to the trust. By removing and specifically investing like sums and deter-

mining that the investment is to be used solely for the purpose of the trust, we have made its ultimate payment doubly certain. If the purpose of the trust is of great importance we might go still another step, as is often done in connection with the redemption of bonds, and place the investment entirely out of our own hands and in those of a trustee with instructions to use the funds that accrue in following the terms of the trust. This is the most certain method of providing for the availability of current assets at the time they are required, for if, as current assets are removed from the business, they are immediately replaced by current profits reserved from those available and intended for dividends, there is but a slight chance that the business will be crippled through a shortage of working capital and also, as the investment is not subject to the changing modes of a board of directors whose membership varies from year to year, there is a slight possibility that the fund will be applied to some other purpose.

In connection with the investment of reserves, it appears that, so long as the majority of industrial concerns are compelled to borrow money with which to conduct operations, it is inadvisable to create investments, which must necessarily bear a very low rate of interest, to make certain the availability of current assets should they be ultimately required, while the funds invested can be used to such a good purpose in the operation of the business, unless, of course, the certainty of availability of such funds is very essential to its welfare. Such a case arises in connection with an Insurance Fund which would be absolutely useless if it were invested in the business and liable to destruction with the rest of the business.

Investments of Reserves are provided for, under con-

tract, in connection with various bond issues but, as the trustees are usually authorized to purchase the bonds of the company with its trust funds thereby securing the same rate of interest, its ill effects are to a great extent nullified.

In the C. P. A. examinations, it is often required to determine which of certain accounts pertaining to Reserves and Investments, represent assets and which liabilities. Such a question should be answered very fully, outlining the possibility, whenever it exists, of the account being either a debit or a credit. As an example, take the term "Investment Fund." This might represent certain sums reserved out of profits or possibly certain quick assets available for investments. In the former case it would appear as a credit and in the latter as a debit. As a further example, take the term "Sinking Fund." The usual use of the term represents an investment but still it is also used to represent not only the Sinking Fund Investment, but also the Sinking Fund Reserve. It is very seldom, if ever, used entirely as a credit without a corresponding debit.

Other terms that occur are "Contingent Fund," representing a provision for contingencies, and "Redemption Fund," providing for the redemption of some debt, either of which may be debits or credits or both, with a slight preponderance in favor of the debit.

To determine, arithmetically, the amount of the installments required to accumulate a particular sum during a given time, ascertain the compound interest on $1.00 for the period the first installment will run, then from the figures you have used, ascertain the accumulation of a like sum deposited or invested at the end of each succeeding period. The total of these will represent the value of an annuity of $1.00 for the period of the sinking

fund. Dividing this amount into the amount which it is desired to accumulate will give the amount of the required installments.

To illustrate, the value of $1.00 at 4% compound interest, has been ascertained as follows:

0 years....................	$1.00	
1 years....................	1.04	
2 years....................	1.0816	
3 years....................	1.124864	
4 years....................	1.16985856	$5.41632256

hence, $1.00 deposited at the end of each year for five years at 4% interest, compounded annually, will at that time, amount to $5.41632256. This sum divided into any amount it is desired to accumulate under these conditions will give the amount of the annual contribution.

At the time the contribution is made, Cash is removed from the usual receptacle and invested or placed in the hands of a trustee for investment. The entry on our books will be:

Sinking Fund Investment or Trustee	X	
Cash		X
Cash placed in the hands of Trustee for investment to provide for...........		

Then to replenish the working capital, if it is desired to do so, we will make the entry:

Undivided Profits	X	
Reserve Fund for............		X
The above amount is set aside as a reserve to re-replenish Working Capital		

We now have a Sinking Fund Investment and a Reserve Fund both referring to the same obligation, but each created in a different way and each operating independently of the other. Let us presume that at the end of the

first fiscal year the trustee receives the earnings on the investment. Our entry is:

Sinking Fund Investment or Trustee	X	
Sinking Fund Income		X
Earnings as above reported this day.		

or, if the investment were not in the hands of the trustee the entry would be

Cash	X	
Sinking Fund Income		X
Cash received this day as income on Sinking Fund		

and when the income is invested:

Sinking Fund Investment	X	
Cash		X
The income received is re-invested.		

We now have on our books an account representing the income derived from the investment and we must determine what is to be done with it. It undoubtedly represents an earning on an investment and therefore is a credit to Undivided Profits or some account that is subsidiary to it. We are, therefore, at liberty to close it into the Reserve Fund; in fact the Reserve Fund seems to be the proper place for it as the Sinking Fund not only requires the annual installment but also the accretions if it is to amount to the proper sum when it is required and, if the Reserve Fund is to be the complement of the Sinking Fund Investment, it should likewise receive the accretions. If desired, the transfer from one account to the other could be made through the Profit and Loss Account so the latter will show the actual income from all sources for the period. Unanticipated profits arising through the manipulation of investments could be retained in a separate

account to offset any unanticipated losses that might occur.

It should be thoroughly understood that there is no absolute necessity that the Sinking Fund Reserve and the Sinking Fund Investment Accounts agree. They are independent of each other and although it is desirable that they should agree, it is not essential.

Let us presume, though, that instead of a Reserve Fund we had a Reserve Account representing the Reserve for Depreciation and that this amount was to be invested outside the business to provide for the purchase of new machinery. Our entries would follow very closely on the lines laid out as will be noticed by the following:

Profit and Loss (Manufacturing)	X	
Reserve for Depreciation		X
The annual reserve for depreciation is set aside		
Reserve Investment for replacing Fixed Assets	X	
Cash		X
The annual reserve for depreciation is invested to make certain the availability of Cash when required		

and later:

Cash	X	
Income on Reserve Investment		X
Income received this day		

but now we have an account representing an income from an investment while the reserve account represents a charge against Profit and Loss and is not a subdivision of Undivided Profits; therefore, assuredly the "Income on the Reserve Investment" cannot be closed into the "Reserve for Depreciation." One is a portion of earnings and the other is an anticipated loss or expense and fur-

thermore, the annual charge to Profit and Loss represents the value consumed during the year in the way of depreciation and it should not be reduced in any way by the simple investment of certain funds which are in fact not connected with depreciation at all. We will, therefore, in this case, have to close the "Income from Reserve Investments" direct into Undivided Profits or else allow it to accumulate.

From the above, it would appear that a Sinking Fund, in the usual sense of the term, could not properly be operated in connection with a Reserve Account, for a Sinking Fund infers the use of not only the installments, but also the accretions in the accomplishment of its purpose; whereas the Reserve Account could not and should not be affected by the accretions. Of course, if it were desired to build up a certain sum, say to replace certain machinery, this could be accomplished under the sinking fund method, but the amount of the sinking fund installment would not affect the amount of the depreciation. The latter would be slightly greater as it would have to provide for the same amount in the same time without the benefit of the earnings.

It should be remembered, in connection with the above, that the Reserve for Depreciation should only be charged with the decrease in the value of the article displaced after it has been ascertained. The amount in the Reserve Investment could, however, be used for the purchase of new assets if desired, as no necessity exists requiring that the investment be expended in a particular manner.

Let us go a step further and presume that the bank in which we deposited a portion of the investment had failed. We should reduce the investment by the amount of the loss and charge it to Undivided Profits. The Reserve could remain as it was but, instead of being spe-

cifically invested, a portion of it would now have to be absorbed by the business or, if preferred, the two accounts could be adjusted to correspond by throwing the loss into the Reserve; or, let us presume that, through a number of years, business losses had resulted which not only required all the Undivided Profits to cover but now require a portion of the Reserve Fund. We must reduce the Reserve Fund to cover the deficit for, surely, it would be incorrect to show on one side of our Balance Sheet an account headed "Deficit," while, on the other side, an account appears representing "Undivided (though specially allocated) Profits." Our reduction of the reserve fund in this case has not affected the investment and conditions might be such that it would be unnecessary to draw on the investment at all. Dividends would, of course, cease during the period of the losses.

Let us presume, further, that the Investment includes certain bonds which have been purchased either above or below par. It is self evident that the premium or discount would have to be adjusted each year as the bonds approached maturity and that this adjustment would have an immediate effect on the income derived from the investment. It would not, however, be necessary to give effect to a mere fluctuation in market quotations covering bonds held for permanent investment.

To illustrate still further, we will presume that we have the following accounts on our books:

Balance Sheet of the "X" Corporation

Cash	X	Sundry Liabilities	X
Sundry Assets	X	Dividends Payable	X
Sinking Fund		Bonds Payable	X
Investment	X	Capital	X
		Reserve Fund	X
		Undivided Profit	X
	XXX		XXX

We will also presume that we have accumulated a sufficient sum to pay off the existing obligation. We now convert the Sinking Fund Investment into Cash and with the cash pay off the bonds; or possibly a portion of the investment includes our own bonds which have been purchased by the trustee, in which case we would deduct their value from both the Investment and the Bonds Payable Account with the entry:

Bonds Payable	X	
Sinking Fund Investment or Trustee		X
Bonds cancelled this day		

After closing out the accounts representing the fund and the investment, we have the following:

Balance Sheet of the "X" Corporation

Cash	X	Sundry Liabilities	X
Sundry Assets	X	Dividends Payable	X
		Capital	X
		Reserve Fund	X
		Undivided Profit	X
	XXX		XXX

The necessity of the trust no longer exists, hence the Reserve Fund may be dispensed with and if desired closed into its major account; but, as undoubtedly the necessity of having additional funds has not decreased since the original bond issue was sold, such a procedure would be imprudent as it might result in the distribution of funds as dividends which are required in the business.

Another plan is to set off the amount of the Reserve Fund against any immaterial assets that may appear in the books, as Goodwill, where it represents an arbitrary loading incidental to a purchase of property with Stocks, or Patents, Mines, etc. acquired under like conditions.

The better plan seems to be to distribute the amount in the Reserve Fund as a stock dividend, thereby not only increasing the capital stock and retaining the working capital, but satisfying the stockholders as well. This virtually amounts to capitalizing the earnings and gives us the following balance sheet:

Balance Sheet of the "X" Corporation

Cash	X	Sundry Liabilities	X
Sundry Assets	X	Dividends Payable	X
		Capital (including Reserve Fund)	X
		Undivided Profit	X
	XXX		XXX

C. P. A. Questions

1. Under what circumstances, if any, would it be desirable to specifically invest a Reserve Fund? What class of securities should it be invested in? (XXX.)

2. Define briefly, the following terms: Sinking Fund, Contingent Fund, Reserve Fund, Redemption Fund, Depreciation Fund, Investment Fund. Which of these represent assets and which liabilities? (Ill.)

3. An interurban railway company, wishing to provide against possible accidents, adopted the plan of depositing 2% of their gross receipts each month in a local savings bank as a reserve for that purpose, charging the funds so set aside to an account which they designated "Reserve for Accidents." The total fund for the year amounted to $4,869.26, out of which they paid $950 for accidents occurring and settled during the twelve months, debiting such payment to the Accident Account, and leaving a cash balance in the bank on December 31, of $3,919.26.

The bookkeeper endeavored to close the books by showing the $4,869.26 as a charge against operations for the year arising out of accident liability, carrying over the balance in bank, $3.919.26, to provide for future accidents, and making a corresponding credit to the "Reserve for Accidents" account. This left the company with cash assets of $3,919.26 not represented on the books.

Wherein did the bookkeeper err and what entries should have been made to show the transaction correctly? (Ill.)

4. At the beginning of a certain year a company has a Reserve Fund amounting to $5,000 invested in bonds,

and a balance to the credit of Surplus Account amounting to $7,500. At the close of the year, it is ascertained that the company's operations have resulted in a loss of $10,000. You are requested to show the effect of this result upon the accounts named. (Adapted from D. A. A.)

5. What is a reserve account? How may it be properly established and for what purpose? What, if any, contra account should be maintained? Under what circumstances should these accounts be maintained? Why? (N. Y.)

6. Under the condition that a general mortgage, or trust indenture, makes provision for regular payments to the trustee of a sinking fund which, with accretions from the investment thereof, is to provide for the redemption of bonds at their maturity, state what accounting should be made in respect to the payments into such fund of its interest or profit accretions. Indicate what, if any, distinction should be made between the interest and the profits. Give reasons. (N. Y.)

7. Distinguish between a sinking fund and a depreciation fund. Show the reason for the creation of each fund, and state how each is placed on the books of a company. (N. Y.)

8. How may a reserve account (Reserve Fund) and a sinking fund, both relating to the payment of the same debt be simultaneously operated? What purpose is accomplished thereby and how do said accounts respectively appear on the balance sheet? (N. Y.)

9. On the first of July, 1905, a company borrowed $100,000.00 at 4% per annum, payable half yearly, payment of loan to be made at the end of ten years, at 105%. It was decided to set aside out of profits such a sum as would, with interest, at 4% per annum, provide for the payment of the premium on the loan at end of the period.

It has been ascertained that the proper annual charge to Undivided Profits is $416.46.

From the information given, write up the books in detail for the first two years and also show the journal entries that would have to be made at the end of the ten years to close out the various accounts. (XXX.)

10. The firm of "A. B. C. Co." own a plant worth $10,000.00 and have been writing off a sum averaging $1,000.00 per year for depreciation. They have decided that it would be to their advantage to take this money and invest it in profit bearing securities as a reserve with which to buy new machinery whenever it becomes necessary.

On January 1st of each year they invest this sum in stocks and bonds. Presuming that the interest and dividends amount to 6% per annum and also that it is payable December 31st, what entry would you make in the books at the end of the first, second and third years?

At the end of the third year machinery is purchased to the amount of $2,500.00, to replace other machinery costing $2,000, which has a residual value of $1,400.00, and a book value of $1,500 and which is to be paid for from the sale of a portion of the stocks and bonds that comprise the fund. What entries?

What is the status of the Sinking Fund Investment, Sinking Fund Income and Reserve for Depreciation Accounts? (XXX.)

11. Explain the nature and operations of an Insurance Fund. Is such a fund applicable to all lines of business, and, if not, why? (XXX.)

12. What is a sinking fund? How should the account be treated on the books of a corporation? (N. Y.)

13. Define: Reserve Account, Reserve Fund. (Wash.)

14. The American Manufacturing Company on Jan. 1, 1909, placed in service a piece of machinery which would depreciate, according to its chief engineer, at the rate of 15% per annum. The original cost of this machinery was $84,000.00 and the board of directors agree to set aside annually a sinking fund which, together with the interest thereon, will amount to the original cost at the end of the prospective life of the machinery. This sinking fund is to be deposited with a trust company on Dec. 31st of each year and a corresponding amount at the end of the last partial year of the life of the machinery; interest is to be credited by the trust company at each of these dates at the rate of 4% per annum. Show how the amount of the annual sinking fund payment may be arrived at and prepare a detailed statement for the board of directors, proving that the amount so obtained is correct. (N. Y.)

15. A mortgage provides for a sinking fund to be accumulated in the hands of a trustee from profits prior to dividend payments. Prepare skeleton balance sheet to disclose the state of the fund, dividends declared and payable, appropriations of profits for purpose of the fund and an unappropriated surplus. What effect would losses in excess of such unappropriated surplus have on the sinking fund? (N. Y.)

16. An industrial corporation has an issue of bonds falling due in fifteen years, and has accumulated a fund annually from profits with which to pay off the bonds at maturity. The Fund is invested in interest-bearing securities. How will the payment of the bonds affect the figures and items in the Balance Sheet? (Ill.)

17. Describe briefly how you would bring upon the books of a company a sinking fund created for the purpose of finally redeeming its bonded indebtedness. How

would you treat the assets of this fund and the investment of same? Finally, how would you show the condition of this fund in the balance sheet of the company? (Ill.)

18. What meaning does the appearance of a sinking fund account in a balance sheet convey to you? Should a sinking fund represent specific investments, or may it be offset by equivalent ledger entries? (Ill.)

19. Outline fully the operation of a Sinking Fund. (XXX.)

20. State three purposes for which a Sinking Fund may exist and give examples of each. (Ill.)

21. What entries appear where bonds have been redeemed with the cash turned over to the trustees and where the bonds are cancelled? (XXX.)

22. What are the advantages or disadvantages of retiring a debt by the Sinking Fund method? (XXX.)

23. To what account should the interest received on Sinking Fund investments be credited? (XXX.)

24. After the Bonds Payable and the Sinking Fund Investment accounts have been wiped out and there only remains the Sinking Fund Reserve (Credit), what should be done with the Sinking Fund Reserve Account? (XXX.)

25. In the case of a perpetual undertaking, is it necessary that the Sinking Fund be arranged to retire the entire bond issue? (XXX.)

26. An individual buys a fleet of ships. He then forms a corporation to take them over at double the sum paid by him, payable one-half in debenture bonds of the company, and one-half in its capital stock. A sinking fund is to be provided for the gradual retirement of the

debenture bonds. A public accountant is called in at the end of five years to make up the accounts. He insists on creating a depreciation fund based on the full consideration paid by the corporation. The directors argue that the depreciation fund should be based on the amount of debenture bonds issued, on the theory that the capital stock issued to the vendor was in the nature of a bonus and did not represent any real value. State your views regarding the two propositions. (N. Y.)

27. A reserve fund of $250,000 has been set aside out of the profits of a company and invested in government securities at par. How should the fund and investment appear on the balance sheet of the company (a) if the value has increased, (b) if the value has decreased? Give reasons for your answer. (N. Y.)

CHAPTER XIX

Miscellaneous Subsidiary Accounts

Another use of subsidiary accounts beside that of retaining profits or assets of one period to adjust that period or to provide for some other period, lies in connection with the subdivision of accounts; the most important of which refer to the Cash Account and the Sales Account.

Divisions of Cash Account.

In the majority of concerns, it is desirable to separate the cash items into a number of subsidiary accounts, each representing some depository or fund. The principal of such accounts are Bank Account and Petty Cash.

Bank Account.

The cash with the bankers may be distributed over several banks in the same or in several cities according to the scope of the business, in which case an account should be maintained for each bank.

In practice, it very seldom happens that the balance to our credit on the bankers' books agrees with the balance our books show to be on deposit. This is accounted for by checks outstanding or other items which have not been entered in both sets of books and, in order to verify the accuracy of the accounts, it becomes necessary to reconcile them.

Reconciliation of Bank Pass Book and Bank Account.

This is accomplished by taking the balance of one of the accounts and increasing or decreasing that sum by the

amount of each item that appears in only one of the accounts.

After all of these single items have been ascertained and properly deducted or added to the original balance, the new balance should represent the amount of the balance displayed by the other account. The form which the statement may take varies with the conditions and the views of the accountant; but, in general, it is preferable to arrange the statement so that no deductions appear.

The following is a desirable form:

Reconciliation of the account with the
First National Bank of..............
as at July 1st, 191...................

Balance per our books		X	
Checks outstanding:			
#............	X		
#............	X		
#............	X	X	XXX
Deposits in transit:			
June 29,	X		
June 30,	X	X	
Balance per Bank Pass Book		X	XXX

Another form, more popular than the first, but having the objection of deductions is:

Reconciliation of the Cash Account with the
First National Bank of..................
as at July 1st, 191.......................

Balance per bank statement		X
Less outstanding checks as listed below		X
Balance per Cash Account (Ex. A.)		XXX
Outstanding Checks:		
#............	X	
#............	X	
#............	X	
#............	X	
Total as above	XXX	

Internal Check.
Lapping System.

In devising a system of internal check, it is desirable that all payments be made by check and that all receipts of whatever nature be deposited daily in the bank.

The advantage of depositing the total receipts daily lies in the ease with which the cash receipts may be traced into the bank.

If the total receipts represent any particular sum, the total deposits must equal a like sum and a comparison of the two automatically verifies both of the lists; the only opportunity for fraud lies in that cash receipts may be entirely abstracted, in which case the payee's account will either appear incorrectly on the books or will be credited from some other source with the amount removed; in either case, the possibility of detection being very great, the practice is greatly restricted. The amount abstracted in any one day may, of course, be replaced in the succeeding day with the receipts of that day and a like or greater amount taken from each succeeding day to replace the shortage of the preceding period. In this manner the receipts of any particular day are properly deposited in the bank but the credits, instead of being entered in favor of those making the payments, are entered to the credit of those who paid on the previous day with the result that the cash entries are always at least one day behind the bank entries.

This system is known as the Lapping System. In order to detect its use it is only necessary to procure copies of the deposit slips from the bank and compare the individual items thereon with the entries in the cash book. It is manifestly impossible for the operator to do any more than keep the totals of the deposits and the receipts alike; the items going to make up the two, being the cash or

check receipts of two different days, must be of different amounts and a comparison should immediately disclose the fraud.

The advantage of making all payments by check lies in that more than one person can be made responsible for the payment and, if the check is substantiated by a properly prepared voucher, the entire history of the transaction can be easily traced.

Petty Cash.

Wherever the entire cash receipts are deposited in the bank and all payments made by check, it becomes necessary to arrange some plan for paying the small petty bills, such as car fare, express, etc., which come in from time to time and which are immediately payable or do not warrant the use of a check. These are cared for by appointing some one as Petty Cashier and by providing that person with a fund from which to make these payments. As soon as the fund is exhausted, or at any particular time, the petty cashier is credited with the amount of the payments and a new check is issued to reimburse the fund.

Imprest Cash.
Revolving Fund.

Often the Petty Cash consists of an account in the general books, operated as stated above, which is charged with the amount of the checks issued in favor of the Petty Cashier and credited with the amount disbursed. In this case the balance of the fund might vary from time to time. It is preferable, however, to have a predetermined amount as the basis of the fund and to keep that one item on the books as a charge to the fund, only increasing or decreasing it when it becomes desirable to reduce or

increase the amount of the fund. The amount of the fund should be based on the maximum amount of expenditures for a particular period, say a week or a month, and at the end of each of these periods the Petty Cashier should prepare an itemized list of the expenditures and should secure a check for the exact amount, thereby bringing the fund up to its original sum but without disturbing the original charge to Petty Cash in the Ledger. At all times the petty cashier should have on hand money or vouchers for disbursements to equal the amount of the fund.

As an assistant to the proper vouching of the petty cash, we recommend the use of a bound book, with alternate leaves perforated, printed with columns for the following information: Date, Total Disbursements, Amount Paid, Received by, For whom, Remarks. The above information to be filled in for each payment and to be recorded in duplicate by the aid of carbon. The original copy on the perforated sheet to be removed from the book at the end of the period and serve as a voucher for the check while the carbon copy will serve as a bound record for the benefit of the petty cashier. The original sheet should be of the same size as the regular voucher used by the firm, to facilitate filing with the others, and should contain the same information on the back as to distribution of items, etc.

As a prevention of fraud, the petty cashier should not be allowed to receive any money from cash sales, etc., and should be compelled to produce a receipt for every disbursement, no matter how trivial.

This manner of caring for such payments is known either as the Imprest System or the Revolving Fund System.

Branches.

In the operation of branches, the only difference in the handling of the cash will be that the cashier will usually have control of the cash receipts of the branch as well as the Revolving Fund and that the Revolving Fund will necessarily have to contain a larger amount than would be desirable were it possible to reimburse it on a few moments notice.

The Cashier should not be allowed to confuse the receipts with the disbursements and should be compelled to deposit all receipts of whatever nature in the bank to the credit of the Executive Office and in turn the Executive Office should replenish the Revolving Account of the Branch upon the receipt of proper vouchers for expenditures.

Sales.

The Sales Account is intended to contain a complete record of the sales of the articles acquired or manufactured for that purpose and, in the majority of concerns, no subsidiary accounts are required. A few concerns, handling a diversity of products, divide their sales into various sub-accounts, each representing the class of article disposed of; but, except in rare cases, this seems a considerable waste of time. The principal desirable cases arise in connection with concerns handling, in addition to their own product, some article on which they pay a royalty or which is handled on a commission basis; or where, as in the case of a branch office handling a number of products, the percentage of profit on which varies, it is desirable to keep a check on stock by applying the actual profit on turnover in comparison with the estimated profit that the goods should bring.

In order to accomplish this distribution of the sales, extra columns are provided in books of original entry for each class of product or each division determined upon in addition to the column containing the original entry, then, as each sale is recorded, it is analyzed and the proper amounts extended into each of the distribution columns to the credit of the proper subsidiary account.

Cash Sales.

Wherever it becomes desirable to separately record the sales of the various articles handled, some provision must be made for caring for the sales made for cash. This can be accomplished by providing separate columns in the Cash Book for each subdivision, but, if the Cash Book is thereby made unduly cumbersome, only one column need be provided and all cash sales can be entered therein. Under this plan the total of the column is to be posted to the credit of a Cash Sales Account in the Ledger. The sales, as entered in the Cash Book, should be analyzed and distributed in the Sales Book to the proper columns and their sums retained in a special column headed "Cash Sales," the total of which would be posted to the debit side of the Cash Sales account in the Ledger. The charge to this account from the Sales Book should exactly equal the Credit posted from the Cash Book and the account should balance from month to month.

Purchases.

Wherever sales are apportioned as outlined in the preceding paragraphs, it becomes necessary to provide like accounts for the purchases and like columns in books of original entry, so that the results obtained from the sale of each product may be ascertained. Cash Purchases may be treated the same as Cash Sales, if desired.

Inventories.

Inventories would, likewise, have to be separated to correspond with the sales, and should be arranged in accordance with the outline given in Chapter VIII.

The principal other accounts that are subsidiary to it are those representing goods that have been transferred to some other person either for that person to sell or as a sale subject to approval. In neither case should the transaction be looked upon as a sale. No valid contract of sale exists and there is a possibility of the goods being returned, hence they should be included in the inventory the same as other goods in possession. Often such sales are billed out at a sum in excess of the actual inventory value, in which case, whatever account received credit for the loading should be adjusted at the time of inventory.

Goods with branches are usually treated the same as Consignment Sales and should likewise be reduced to inventory value at the end of each period. At the opening of the new period, whatever entry was made to effect this result may be reversed and the original record of the transaction given effect again for use during the new fiscal year.

C. P. A. Questions

1. What do you consider the proper way to handle cash in accounts? What advantages are there, if any, in banking each day the exact receipts of the previous day? (Fla.)

2. Describe a desirable system of keeping a petty cash book and petty cash vouchers? (N. Y.)

3. Explain the uses and relations of the petty cash book to the principal cash book. (N. Y.)

4. You have in hand the examination of the cash and bank account of a mercantile firm that uses checks very freely. Draft a reconcilement account, bringing the cash book and bank pass book into harmony at the close of the period under review. (N. Y.)

5. In closing the books, how would you value goods owned by your client and consigned at selling price to customers of your client, under an agreement by which the customers pay for the goods as used? Give reasons. (N. Y.)

6. An auditor for a manufacturing company is confronted with three conditions, viz.: (a) goods shipped "on consignment" and remaining unsold; (b) goods shipped to customers on "sale or return," and remaining unsold; (c) goods on hand at agencies. How should these accounts be valued and placed in the balance sheet? (N. Y.)

7. Rule and title five columns of a petty cash book in addition to the discription columns and make an illustrative entry for and in each distribution column. (N. Y.)

8. A house sends out many goods on approval and treats the transactions as sales. How should such items be treated by the auditor when setting up statements for a period? (N. Y.)

CHAPTER XX

Miscellaneous Collective Accounts

A Collective Account differs from other accounts to the extent that each item contained therein retains its identity throughout its life; whereas other classes of accounts absorb the items that enter into them.

The object of Collective Accounts is to consolidate a number of accounts of a class for statistical purposes or for condensing information without affecting the individuality of the accounts proper.

The record of the various transactions must be such that it will display the effect, not only on the individual accounts, but on the collective account as well.

Bills Receivable.

Their most simple form is that of the Bills Receivable Account, which is intended to contain an itemized record of all the notes received. Each note, although included in the account with the others, must be treated individually and when it is paid must be cancelled from the account.

Bills Receivable Ledger.

If there are such a great number of notes that it would be impracticable or confusing to attempt to keep an individual record of each note in the usual manner, an auxiliary record could be kept; this would allow greater latitude in arranging the accounts and would assist in retaining their identity. Should such a record be maintained, it would not be necessary for the Bills Receivable Account in the ledger to contain such a complete record

as heretofore and, instead of the individual record of each note, it would contain only the totals of the items going to make up the subsidiary record.

In order to secure these totals and to eliminate the mass of detail in the original account, all books of original entry that are to contain items affecting this account should be provided with a separate column for this class of items and the total of the class should be posted to the original account while the individual items, going to make up this total, should be posted to the subsidiary record; or if desired, the original record of the notes received may also become their final record. This could be accomplished by recording the notes in detail, in the order of their occurrence, posting their total to the debit of the Bills Receivable Account in the General Ledger and the amount of each note to the credit of each personal account affected thereby. This original record would then represent the debit side of the Bills Receivable Account; but the Bills Receivable Account in the general books, instead of showing the individual items, would only show the totals, while the subsidiary record would contain the details. As the notes are paid, individual items would receive credit in the subsidiary record and the total of the credits as determined from the book of original entry would be posted to the credit of the Bills Receivable Account in the General Ledger.

Sundry Debtors.

Similar treatment may be accorded the accounts of persons whose business with the firm is limited to the extent that an entire account is not required to contain the record of their transactions. In connection with loose leaf ledgers, the major portion of the accounts are usually alloted an entire page, and these are filed in the

binder in alphabetical order, but certain of them do not require such a great amount of space and, in order to accommodate these, a separate sheet intended to contain a number of accounts is inserted after each index.

Sundry Debtors' Ledger.

A similar record, but in book form, is also used at times in connection with businesses having numerous small accounts with customers who only deal with the firm once or twice a year. It usually contains debit columns the same as the debit side of a ledger, but as payments may extend over a number of months and as the total credits to the book each month might be required in balancing, a number of credit columns would be provided, one for each month in which credits might be applied.

The last column on the credit side should be reserved for extending all items that are not paid in the time provided for by the special columns. This allows for the balancing of each page, and the unpaid items can be carried forward. There is no necessity of providing for the segregation of the charges into months as they would be entered in the order of their occurrence and a new account could be provided for the new customers of each succeeding month.

The plan outlined above automatically forms itself into a series of accounts each one representing the balances carried forward at the beginning of a month and also the charges for that month; a new account being formed each month from the unpaid balances carried forward from the oldest account on the books. The life of an account would be governed by the number of columns provided and, as a new account would be opened each month, there would be as many live accounts as there

were months allotted to each, but each account would be just one month older than the succeeding one.

There is always a possibility that a customer may make more purchases than was anticipated and wherever such a ledger is used it becomes necessary to provide some plan by which the various purchases may be readily connected. It is usually not desirable to attempt to insert additional purchases in the lines originally allotted to the account, as this has a tendency to disturb the totals of the pages, but there is no objection to including, at the end of each monthly account, the purchases that have been made by the persons whose accounts are represented therein; then, in order to call attention to the existence of an additional purchase, the accounts should be cross indexed. The best plan of cross indexing seems to be to use a combination of the last figures appearing in the folio numbers and to place these just before each account shown. Should greater individuality of cross indexing be desired, arbitrary letters may be used in connection with the figures to designate certain accounts.

As an example, John Jones' account appears on page 660, on the tenth of the succeeding month he makes another purchase which is recorded, at the end of the account containing his original purchase, on page 664. We wish to cross index them and, presuming there is already an account indexed "04," we will index these "A04."

The plan of using the ledger as a book of original entry as outlined under Bills Receivable is used to good advantage in connection with sundry debtors in such lines of business as Telephone Companies, etc., which have a regular recurring charge against each account each month. The number of postings is greatly reduced if the one record can be used both as the original and the final

book entry. In fact, though, in the majority of cases in modern accounting, some record on charge slips, meter reading reports, etc., is the actual original and the books invariably refer to them.

Controlling Account.

Wherever a subsidiary record is kept there must be some account in the General Ledger to contain a synopsis of the items in that record. Such an account is considered as controlling the subsidiary record and is known as the Controlling Account.

Adjustment Account.

If the condition of affairs is such that the persons keeping the subsidiary record do not have access to the controlling account, either because the records are kept in different offices or cities or because it is not desired that the various bookkeepers refer to the General Ledger, they can make the subsidiary record self balancing by setting up an adjustment account in their ledger to contain the complement of all entries that enter therein. This adjustment account would contain the same items that are in the Controlling Account in the General Books but would show them on opposite sides.

To illustrate: The debit entries to the various accounts in the subsidiary ledger would appear, in total, as the debit of the account representing them in the General Ledger, but, to the credit of the account that is set up in the subsidiary ledger to counterbalance them; hence the adjustment account must be the complement of the controlling account.

The advantage of such accounts lies in that the work may be apportioned over a considerable number of bookkeepers, each of which will be able to prove his own work without disturbing the other and without affecting the

controlling records, and that the general books will contain all the required information about the accounts contained in a subsidiary record, without the mass of detail, thereby enabling the easy preparation of financial statements.

Too much stress should not be laid upon the accuracy of the Controlling Account for, if the records going to make up the totals are incorrectly added, both the controlling account and the account that received the other portion of the entry will have received the incorrect sum without throwing the General Ledger out of balance.

Subscription Account.

The Subscription Account is another form of Collective Account.

It is usually undesirable to fill up the general books with accounts with persons who have subscribed for the stock of the corporation and, in lieu of so doing, an auxiliary record of these accounts is kept; the total only appearing in the general books under the heading Subscription Account.

Capital Stock Account.
Stock Ledger.

The Capital Stock Account is also a Collective Account and is usually cared for in the same subsidiary ledger by the use of Combined Accounts as outlined in Chapter IV, but in this case the quantity of shares will control instead of their par value hence plain ruled columns should be substituted for those used where money is to be recorded.

At the time stock is subscribed, an entry is made in the general books debiting Subscription and crediting Capital Stock, therefore, in the subsidiary books we must debit each subscriber with the amount of his subscrip-

tion and credit him with the quantity of stock that represents his interest.

In order to keep this ledger in balance, Adjustment Accounts should be opened with Capital Stock (shares) and Subscription (dollars) and should be arranged so they will be the complement of their Controlling Accounts in the other ledger.

Such a ledger would be provided with columns to contain the following information:

Debit: Date; Certificate Number; Disposition;
Shares, quantity; Subscription Liability.

Credit: Date; Certificate Number; How Acquired;
Shares, quantity; Subscription Paid.

The amounts entered in the Adjustment Accounts should be entered in columns to correspond with the entries in the Personal Accounts and should allow the balancing of each set of accounts separately, i. e., the items entered in the Shares Column, debit, should equal those entered in the credit column, and the amounts entered in the Subscription Column, debit, should equal the credits entered.

Dividends Payable Account.

It is unnecessary to include in the general books, accounts with each of the stockholders at the time dividends are declared. Instead the amount of the dividend is credited to Dividends Payable Account and as the dividends are paid this account is charged, a subsidiary record being kept to contain the detailed information and accounts.

Expense Account.
Expense Ledger.

The tendency of modern accounting is to carefully apportion all items of expense. This usually requires a

considerable number of distribution columns in the books of original entry, often making them very cumbersome, but if desired, relief can be obtained by extending all items of expense into one column and then analyzing and distributing the items in a separate book provided with the columns for each sub-division.

The total of the entries in the subsidiary record must equal the total entries in the expense column for a like period and will take its place in any financial statements that are prepared, or in the books, if desired.

Salary Account.
Salaries Ledger.

In many concerns, it is undesirable that the office employees know the salary each is getting. If the information is recorded openly in the cash book, they will undoubtedly devise some plan to secure it. It is also sometimes desirable to distribute the salaries over a number of departments. In either case a Salaries Ledger, operated on the principle of the Expense Ledger, could be used to contain this information and, if it were important that this information should not be disclosed, a lock ledger could be used, in which case only those possessing a key could inspect it.

Materials Account.
Stores Ledger.

In connection with cost accounts, it is important that a careful record be kept of all stores on hand. This is accomplished by keeping a complete record of each article in stock; the Materials Account in the General Ledger acting as a controlling account. Every item that is purchased must be charged to the Materials Account in the general books and likewise to the account representing that article in the Stores Ledger.

As they are used, this account is credited and likewise the Material Account in the General Ledger. The credits to the General Ledger Account being in totals only. At the end of any period the value of the stock on hand may be ascertained by referring to the Materials Account while the quantity of each article is always disclosed by the stores record.

Accounts Receivable.

Sales Ledger.

The principal use of Controlling and Adjusting Accounts lies in connection with recording and separating the accounts representing the sales to customers. These are usually recorded in a separate book, but, if the business is exceptionally large, many ledgers may be used, each containing certain subdivisions of the accounts. Each ledger should contain an Adjustment Account to make it self-balancing and the general ledger should have a separate controlling account for each one. Such a plan necessitates that all books be provided with distribution columns into which the accounts affecting each ledger may be segregated. The following are good examples of sub-divisions:

Alphabetical:	"A to E," "F to I," etc.,
Districts:	City, Country, or
	City, Wash.; Ore.; Ida.; B. C.
Salesmen's territories:	Brown's Ledger,
	Hill's Ledger, etc.

Numerical or decimal (usually used with cards, giving each account a number; the individual figures of which might represent territories, salesmen, etc., in addition to the actual account number.)

Accounts Payable.
Purchase Ledger.

A Purchase Ledger may be operated on the same plan as the Sales Ledger, but to contain the accounts with creditors. It is usually not required to keep a great number of such ledgers but such a plan could be evolved if necessary. The most common subdivisions are City Purchases and Out of Town or Country Purchases.

Plant Account.
Plant Ledger.

A Plant or Equipment Ledger is often operated auxiliary to the Machinery or Plant Account, and, in general, also the Reserve for Depreciation and Reserve for Renewal Accounts. Such a ledger is controlled by the above mentioned accounts and contains the history of every article included therein, with the provision that has been made for depreciation, repairs and renewals. It serves as a basis for determining the advisability of purchasing certain similar articles in the future and also of adjusting the controlling accounts or the rate of depreciation at the time an article is sold or appraised.

One of its principal advantages is that the depreciation and the repairs or renewals on each article may be treated independently without affecting the other articles included in the plant account.

Investment Account.
Investment Ledger.

Wherever a concern makes extensive investments in bonds, etc., it becomes desirable to isolate such accounts from the general books. A separate ledger can be easily adapted to this purpose and can contain accounts with each security purchased and its accretions without unduly

affecting the general books. If desired, a separate journal could be used to record the results, in which case it would only be necessary to reconcile the Adjustment Account and the Controlling Account at the end of each fiscal period. The combined account form is most desirable for use in this connection.

Suspense Account.
Suspense Ledger.

It is very undesirable to cancel a customer's indebtedness from the ledger for, possibly, at some future date the customer may become able to pay, in which case, even though the account be "outlawed" it is often possible to have him to do so; neither is it desirable to load up the active ledgers with these dead accounts. The better plan is to transfer the account, bodily if loose leaf ledgers are used, to a Suspense Ledger, where it can receive such attention as it is possible to give it. Needless to say, the Controlling and Adjustment Accounts of both Ledgers should be adjusted to give effect to the transfer.

Accounts representing notes, over due and uncollectable, may be treated in the same manner, but as a precaution against the loss of the notes they should be affixed to the account leaf in the Suspense Ledger.

Private Ledger.

In connection with the general books of many concerns there is much information which it is desirable to keep private. This is particularly true of that contained in accounts referring to the capitalization, owners, inventories, fixed indebtedness, investments, etc. The number of entries affecting such accounts are, necessarily, very small and if the accounts were removed they could easily be kept by the firm's consulting accountant, while their isolation from the more active accounts would effect-

ually debar any of the employees from learning the condition of the firm.

In order to accomplish such a result, the general ledger would contain only such accounts as are built up from day to day in the regular course of business and also an adjustment account with the private ledger, to keep the general ledger in balance. It would have, as before, numerous subsidiary ledgers but, in turn, would be subsidiary to the Private Ledger.

The Private Ledger would contain in detail all of the accounts that were not included in the General Ledger and also a Controlling Account representing those accounts remaining open in the General Ledger, at the time of the last closing, as well as the transfers that have been made between the two books in the meanwhile.

In closing the books at the end of each period, it becomes necessary to, in effect, close all of the accounts of the General Ledger into the Private Ledger, but, as in fact, many of the accounts are immediately returned to the General Ledger, it is only actually necessary to transfer the totals of certain of the revenue accounts to that ledger. The adjusting entries are made in the private books to close and adjust the accounts and to open them again.

Auxiliary to the Private Ledger, it is desirable to operate a Private Cash Journal, which, if it is of sufficient detail, might provide for all the accounts represented and could entirely supplant the ledger.

C. P. A. Questions

1. Show the manner in which controlling accounts are employed in commercial and municipal bookkeeping. (N. Y.)

2. Does any advantage attach to the employment of more than one volume for the ledger of a business requiring only one bookkeeper? Give reasons. (N. Y.)

3. Describe a system of bookkeeping wherein the errors may be localized. (N. Y.)

4. What are Controlling Accounts? For what purpose are they employed and how are they conducted? (Va.)

5. What do you consider the best subdivision of ledgers, when sales amount to $6,000,000 to $10,000.000 per annum in a manufacturing business, say steel? Describe fully, your plan or method of connecting up the ledgers employed, also the method of treating purchases and sales. (Penn.)

6. What do you understand by a self balancing purchase ledger? Describe fully the method of keeping it. (R. I.)

7. Describe a way of keeping a Bills Receivable Book as a book of original entry from which the credits to personal accounts are posted in detail while only the total of monthly charges and liquidation of notes are posted to the bills receivable account. (N. Y.)

8. In auditing the accounts of a firm, you find a number of dishonored and overdue notes which form part of

the balance of bills receivable account. State fully what you would do with these. (Penn.)

9. A manufacturer makes extensive investments in stocks and bonds, buying and selling from time to time as the market conditions warrant and clearing all such transactions through his regular books of account. How could such transactions be isolated from his manufacturing operations and what books and accounts should he employ to record the details of the principal and income from such investments? (N. Y.)

10. Explain the purpose and manner of keeping a private ledger as part of the financial books of a firm or corporation. (N. Y.)

11. On January 1, 1912, a firm possessed the following assets:

Buildings		$3,000.00
Plant and Machinery		2,000.00
Inventory Mdse		2,000.00
Accounts Receivable:		
Smith	$400.00	
Jones	500.00	
Brown	200.00	
White	400.00	
Stone	100.00	
Roberts	600.00	
Allen	200.00	
Dick	600.00	
Currie	200.00	
Johnston	200.00	
		3,400.00
Cash		600.00
		$11,000.00

The creditors were made up as follows:

Long	$550.00
Thin	550.00
Black	600.00
Kay	300.00
Low	900.00
Robb	1,100.00
	$4,000.00

The Capital of the firm belonged in equal shares to Peat and Smart.

During the month of January the following transactions occurred:

Sales		Cash Received	
Smith	$100.00	Smith	$500.00
Jones	150.00	Jones	500.00
Brown	200.00	Brown	300.00
White	50.00	White	300.00
Stone	200.00	Stone	150.00
Roberts	300.00	Allen	300.00
Allen	150.00	Dick	750.00
Dick	200.00		
	$1,350.00		$2,800.00

Purchases		Cash Payments		
Long	$500.00	General Expense		$500.00
Thin	300.00	Peat		200.00
Black	500.00	Smart		200.00
Kay	400.00	Long	$550.00	
Low	200.00	Thin	550.00	
Robb	200.00	Black	200.00	
		Kay	300.00	
		Low	500.00	
		Robb	400.00	
				2,500.00
	$2,100.00			$3,400.00

Record these transactions in a Sales Ledger, Purchase Ledger and General Ledger, making each self balancing. Take off a Trial Balance from each Ledger and close the books as on January 31, 1912. Inventory at that date was $3,000.00. Reserve, $200.00 for Outstanding Expense, and $100.00 for possible loss from Bad Debts before closing.

12. Explain how you would install for a large concern, a system of bookkeeping arranged so that only the proprietor or officers of the company, together with their auditor, a Certified Public Accountant, shall be cognizant of its financial condition and annual profits or losses. (Ill.)

13. In closing the books of a firm, it is found that the accounts receivable include $5,000.00 of worthless accounts and $10,000.00 of doubtful accounts. The firm decides to deduct from the gross profits $15,000.00 for these items. What would you consider the best method of carrying these items on the General Ledger? (N. Y.)

14. Describe fully the operation of the controlling account expedient as used in connection with a private ledger. (N. Y.)

15. State fully how the disbursements entered in a petty cash book should be carried to the controlling account of expenses in the general ledger and to the detail accounts in the expense ledger. (N. Y.)

16. What books of a mercantile firm should be treated as books of original entry and be posted direct to the ledger? Give an example of an entry that should necessarily be made in the journal. (N. Y.)

17. What accounts should be embodied in the private ledger to make it a complete synopsis of the business?

How would you prove the correctness of the accounts? (N. Y.)

18. Describe several economies in accounting made possible by the introduction of special columns in books of original entry. (N. Y.)

20. In designing a set of accounts for a business, how might provision be made for a constant showing of the aggregate sum owing by customers and the aggregate sum owing to creditors, without the necessity of preparing a schedule of the accounts of such customers and creditors? (N. Y.)

21. Give several methods of keeping the records of petty accounts and accounts with infrequent customers. (N. Y.)

CHAPTER XXI

Trial Balance

A Trial Balance is another form of Collective Account. It consists of a record of the status of each account, prepared for the purpose of determining the correctness of the amounts posted to a ledger.

Its use is based on the fact, that, in double entry books there must be a like amount of debits and credits. It is only used to test the accuracy of the postings and is not even presumed to be conclusive proof that they are correct. It is the absolute certainty that there is an error somewhere when its sides do not agree that makes a trial balance valuable. It is sometimes looked upon as very valuable by office managers, etc., in determining the status of the business, but as it only shows the balances of the accounts, without special reference to their value or relation to other accounts and without giving effect to the various accrued or deferred items, the information they derive must be very slight.

The principal errors that are not located, through the agency of a trial balance, are errors of posting to the wrong account or incorrect postings that are counterbalanced by other inaccuracies. These are of such rare occurrence that the usual bookkeeper is satisfied that his work is accurate if he is able to secure a balance.

The method of balancing is to prepare a synopsis of the accounts in a ledger and then to make the totals of the debits and credits agree.

The synopsis taken may be a list of the footings of each side of every account, a record of the balances remaining, or a summary of the debit and credit postings to each account each month.

Proof by Footings.

The most popular method of taking a trial balance is by the aid of footings. It has an advantage over the other methods in that it is the simplest to draw off and also as the possibility of making an error in determining the balance of the account is eliminated. By this method it is possible to ascertain upon which side the error lies and the amount thereof. To accomplish this result a record is retained of the totals of the accounts outstanding at the first of each month; to their sum is added the totals of all books of original entry then, provided no accounts have been ruled up during the month, the total of the footings of accounts in the ledger must equal the total of the original balances and the entries that have been posted during the period under review. Where this plan of proving is to be used, it is better not to rule up any accounts except just after balancing the ledger, then the total of those ruled may be deducted from the original total to secure the beginning total for the succeeding month.

Proof by Balances.

The proof by balances offers a slight advantage for, as soon as the books are in balance, the Trial Balance contains proper footings for use in drawing up any financial statements that may be required, whereas the other form of Trial Balance will require reducing to balances before the figures can be used.

Proof by Charges and Credits.

This method of proving, while it involves considerably more labor in drawing off the balance, is undoubtedly the easiest to prove and is to be recommended wherever the bookkeepers lack experience or accuracy in their work, as the additions, balances, etc., automatically prove themselves on each page.

In order to make each page self balancing the trial balance should contain not only the charges and the credits for the month, but also the balances at both the beginning and end of the period under review. It would appear as follows:

Folio	Name	Beginning		Current entries		Ending		Proof
		Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	
Page 1:								
40	Purchases	500		200	10	690		
50	Sales		800	40	740		1500	
60	Plant	800		100		900		
61	Expense	300		47		347		
64	Cash	400		550	247	703		
66	Proprietorship		2400				2400	
		2000		937			3900	6837
			3200		997	2640		6837
Pages 2-12:								
	Sundry Accounts	1200		740	680	1260		
		3200		1677			3900	8777
			3200		1677	3900		8777

As a proof that the additions have been correctly made on each page, columns one, three and six must equal columns two, four and five. If an incorrect balance has been entered; if it has been placed on the wrong side; or, if an error has been made in addition, the above proof will disclose it.

If, after the above items are proven, the column totals

are not in balance, it is undoubtedly due to certain errors existing in the figures used, and it becomes necessary to take each column separately to localize the error.

Columns one and two are easily verified by reference to the preceding trial balance. Column three must equal the total debits as disclosed by adding the various books of original entry; the difference existing, if any, represents the amount of the error on the debit side and, this being known, it is usually an easy matter to pick it out. The same rule applies to proving the fourth column. After columns one, two, three and four have been proven, numbers five and six are an easy matter as the errors therein can only be those that are the result of failure to properly adjust the items to correspond with the corrections made in proving the others, and such errors are disclosed by re-adding each page of the trial balance and proving the footings as outlined above.

Besides being exceptionally easy to prove, a considerable advantage accrues to this form of trial balance in connection with systems of internal check, particularly in connection with branch offices, as the entries affecting each account or each class of accounts each month are given in the trial balance and the bookkeeper at the branch can usually prepare a report covering the source of the items affecting the principal General Ledger Accounts; this report to be used by the auditor at the home office in analyzing the various transactions and verifying the entries to all of the accounts.

C. P. A. Questions

1. Does a trial balance in which the aggregate of debits and credits correspond prove the books to be correct? If not, explain why it does not. (Penn.)

2. Explain how one should proceed to detect an error in a trial balance. (N. Y.)

3. Trial Balance:

    (a) Describe the same and its uses.
    (b) Do you consider its use necessary? (N. J.)

4. Outline the different plans of preparing a trial balance and give the relative advantages. (XXX)

CHAPTER XXII.

Profit and Loss Account.

In closing the books at the end of a period it will be found that, provided the accounts have been adjusted to show their true position, every account therein represents either the progress of the undertaking up to that particular point or the condition of the various elements of value as at that particular moment.

Those relating to the condition of affairs are allowed to remain on the books, while those representing progress, or which are required in determining the progress, are transferred to an account which summarizes the results obtained.

Profit and Loss Account.

Such an account is usually termed the Income, Revenue, Loss and Gain, or Profit and Loss Account.

There is a considerable lack of preciseness in accounting terminology in connection with the use of the term Profit and Loss as applied to the statement displaying the profits or losses of a concern. Often it is intended to signify an account containing sub-divisions for: Manufacturing, Trading, Administration, Net Profits and Profit and Loss Appropriation items, while, in other cases, the Manufacturing and Trading sections are presumed to be separate accounts and the remaining three sections are considered as the Profit and Loss Account.

Separate accounts in the ledger would assuredly be used to contain the various classes of items and it is undoubtedly proper to apply the term Profit and Loss to the one displaying the ordinary business profit of the concern and the causes leading thereto. Likewise the

statement prepared from the three accounts may be designated by the same term, as it contains the same information. The only difference being that it dwells more fully upon the source of the profits.

Manufacturing Section.

The Manufacturing Section is intended to disclose the results of manufacturing during the period under review. The principal items going to make up this section are:

The Cost of Material Consumed,
The Cost of Labor, and
The Expense of the Factory.

The account, therefore, should be divided to show first, the prime cost (cost of labor and material), then the completed cost of the goods manufactured and would appear similar to the following:

Manufacturing

To Cost of Material Used:			By Prime Cost, Carried forward	X
Inventory, raw material beginning of period	X			
Purchases	X			
	X			
Less Inv. end of period	X	X		
To Labor		X		
		XXX		XXX
To Prime Cost, bro't down		X	By Inventory partly m'f'd goods, last of period	X
Inventory, partly m'f'd goods, beginning of period		X	By Cost of goods m'f'd carried for'd	X
Power, Reserve for Dep. on machinery, etc.		X		
		XXX		XXX

The inventory of partly manufactured goods at the end of the period should not be deducted from the inventory at the beginning of the period for it contains portions of the items consumed during the period as well as of the original inventory.

Trading Section.

This section covers the sale of the goods and the profit thereon. In a purely trading concern such items as Infreight, Duty, etc., would have to be included in this section, but in a manufacturing concern they would be a portion of the cost of manufacture and would appear in the Manufacturing Section.

The Trading Section should be arranged to disclose

The Cost of the Goods Sold (the Turnover),
The Net Sales,
The Gross Profit,
The Expense of Selling, and
The Profit on Trading.

In form, it would be as follows:

Trading

To Cost of Goods sold:			By Sales:	X	
Inventory, Finished Goods, beginning of period	X		Less Returns, Allowances or Trade Discounts	X	X
Cost of Goods m'f'd brought down	X				
	XX				
Less Inventory, end of period	X	X			
To Gross Profit, carried for'd		X			
		XXX			XXX

To Selling Expense:			By Gross Profit:	
Salesmen's Salaries	X		bro't down	X
Commission	X			
Traveling Expense	X			
Rent of Salesroom	X			
Cartage or Freight outwards	X	X		
Reserve for Bad Debts (based on Sales)		X		
To Profit on Trading, carried for'd		X		
		XXX		XXX

Administration Section.

The Administration Section is intended to contain all items which relate to the expense of conducting the business.

The information usually desired is:

The Expense of Conducting the Business, and

The Ordinary Business Profit.

In form it would be as follows:

Administration

To Management or Office Salaries	X	By Trading Profit, bro't down	X
General Expense	X	Income not directly connected with Sales:	
Office Supplies	X		
Rent	X	Rent of Store, etc.	X
To Ordinary Business Profit, carried for'd	X		
	XXX		XXX

Net Profit Section.

This portion of the statement receives all those items which are a direct result of the excess or deficiency of Capital or which are not in the ordinary run of business. As credits, such items as Income from outside investments or Cash Discount, secured owing to the ability of the firm to make prompt payment, are shown; while

such items as Interest paid on Loans or Bonds, etc., or Unusual Losses represent the charges thereto.

The Ordinary Business Profit of the concern is the basis on which Goodwill is valued, therefore, any income, expenses or losses that occur which are not in the ordinary course of business or which may be traced to capital that is not required in the business or which the business requires, but which must be received from outside sources, should be included here.

Such a statement would appear as follows:

Net Profit

To Expenses, incidental to securing capital:		By Ordinary Business Profit, bro't down	X
Interest on Loans, etc.	X	Income from Investments	X
Cash Discount on Sales	X	Cash Discount on Purchases	X
To Unusual Losses:			
Defalcations, Fire, etc.	X		
	XXX		XXX

Considerable divergence of opinion exists in connection with the treatment of Cash Discounts, and the items will be found in either section of the Profit and Loss Account.

We have placed them in the Net Profit Section for, in our belief, they represent the result of a lack of or a sufficiency of capital.

Cash Discount of Purchases is not an element of cost for surely, if a profit is made during any one period of a company's existence, owing to Cash Discounts on Purchases, it must be due to financies rather than to the ability to purchase cheaper.

In selling the concern, although possibly the fact that the firm has always discounted its bills may be of some value, consideration would not be given it in estimating the goodwill value. The ordinary business

profit of the concern as displayed by the Profit and Loss Account should not, for this reason, be disturbed by the inclusion of Discount on Purchases in the Manufacturing or Trading Accounts. The discount should appear in the Net Profit Section below the item Ordinary Business Profit.

The same argument holds true of Cash Discount on Sales. It has been asserted that such a discount is purely a reduction of the selling price of goods. Possibly it is in some cases, but in general, it is an after consideration and is in the nature of an offer made by the seller in an effort to secure the payment of accounts in advance of their due date; the acceptance thereof, depending entirely upon the finances of the purchaser.

Cash Discounts on Purchases are undoubtedly a question of finances rather than of cost and as Cash Discount on Sales is the effect of the same transaction, but in the other persons books it must also be a question of finances. It would, therefore, appear in the Net Profit Section of the Profit and Loss Account.

Profit and Loss Appropriation Section.

This section is virtually a transcript of the Undivided Profits Account. It is intended to show the profits available for distribution and their disposition. It might contain the following items:

P. & L. Appropriation

(Partnership)			
To Interest on Capital	X	By Balance from Previous Year	X
To Apportionment amongst Partners	X XXX	By Net Profit, Current Year	X
(Corporation)		By Profit from Sale of Fixed Assets	X
To Special Reserves	X	(If apportionable over prior years)	
To Dividends	X		
To Balance (Undivided Profits)	X XXX		XXX

C. P. A. Questions

1. Describe the process of closing the books of a corporation at the end of a fiscal year, showing a Trading and a Profit and Loss Account and explaining the treatment of reserves for depreciation and for bad debts, as well as for the surplus or deficiency resulting from the operations of prior years. (N. Y.)

2. Explain the difference between a Trading and a Profit and Loss Account. (N. Y.)

3. (a) What constitutes Manufacturing Cost? (b) What constitutes Selling Cost? (c) What relation do cumulative preferred stock dividends bear to cost of operating? (Mich.)

4. When preparing a Trading and Profit and Loss Account at the end of a fiscal year, in what manner would you treat the following subjects:

   (1) Surplus or deficit brought forward from prior year?
   (2) Reserves for Depreciation?
   (3) Reserves for Bad Debts?
   (4) Interest on Bonds?
   (5) Dividends on stock?
   (6) Surplus or deficit carried forward to succeeding year? (N. Y.)

5. State your understanding of the difference between Gross Profit and Net Profit. (Ill.)

6. In preparing a statement of the earnings of a business, covering a period of five years, how, in order to determine what the average earning capacity of said business had been, should the expenditure for interest

paid on bills payable and loans, and on accounts payable be considered? (N. Y.)

7. After auditing the books of a manufacturing company for a period of ten years, you are asked to give a certificate as to the net earnings of the business for those ten years for the purpose of a sale based on the earning capacity of the property. What items of expense, heretofore charged annually through the Profit and Loss Account, may be properly eliminated in the preparation of your certificate, and why? (Wash.)

8. Without using figures, draft a Profit and Loss Account in which Gross Profits are distinguished from Net Profits. (Wash.)

9. Define and differentiate the following kinds of accounts: (a) real and nominal, (b) personal and impersonal, (c) current and summary, (d) controlling and specific. (N. Y.)

10. In making up a statement of Profit and Loss, where would you show (a) cash discount allowed customers for prompt payment of bills, (b) cash discount deducted in payment of invoices of your clients? Explain briefly and give reasons. (N. Y.)

11. Give proper disposition of any balance appearing in a Profit and Loss Account at the end of a fiscal year. (Ill.)

12. In summarizing the nominal accounts of a manufacturing concern to determine the result of operations for a period: (a) What would be the order and character of the three closing accounts? (b) What nature of accounts form the elements of each? (Ill.)

13. What is the purpose of a trading account, and what general result should it show? In closing the

ledger what disposition would be made of the balance of the trading account? (N. Y.)

14. State the different steps in the process of closing the ledger at the end of a fiscal period and give the reason for each step. (N. Y.)

15. Explain the difference between a Trading Account and a Profit and Loss Account and state in which account you would place the following items, giving your reasons:

Purchases.	Sales.
Carriage and Freight.	Stock on Hand.
Debenture Interest.	Returns.
Depreciation.	Discounts.
Allowances.	Fuel.
Bad Debts.	Packages.
Wages.	Directors' Fees.
Commission.	(Inst. of C. A.)
Advertising.	

CHAPTER XXIII.

Balance Sheet

A Balance Sheet is an account prepared from double entry books to display the status of a business as at a particular moment. It is in the nature of a Trial Balance taken immediately after closing the books, but differs to the extent that every account therein represents the summing up of some element of value; whereas, the Trial Balance, taken at any other time, would contain many balances relating to the previous period and also many accounts representing the progress of the business.

The object of a Balance Sheet is to display a true statement of the financial condition of a concern. It is well, however, to bear in mind that such a statement taken as a whole is not to be construed as a statement of facts but rather as a statement of opinion, the value of which varies greatly with the knowledge and experience of the persons making it up. True, all of the items therein are facts if the statement is prepared by a person versed in the work, but, owing to the methods of valuing the different classes of assets and the various degrees of responsibility existing in regard to the liabilities, it cannot be accepted as anything more than a synopsis of Ledger Balances which have been adjusted to show the true condition of each element of value according to the prevailing rule of its valuation.

To the extent that these balances have been adjusted by the auditor to display the proper value of the accounts for Balance Sheet purposes, the balance sheet may be accepted as his opinion of the condition of the concern.

If a statement is desired for any purpose other than that outlined above, say to display the value of the assets in case of liquidation or to determine the sale value of the business, some other method of valuation and of displaying the results must be used and, even then, we have but the opinion of some one as to the probable result or value.

In the preparation of Balance Sheets, much depends upon the knowledge and ability of the auditor to display the facts in a manner that they may be easily and properly interpreted. Items, such as Reserve Accounts, that are offsets to others, should be deducted from their major account, while items of a class like Surplus and Reserve Funds should be grouped or, possibly, if their individuality is not important, be shown as one item. Care should, however, be taken that the items grouped are identical, otherwise the term applied to the group may greatly mislead. It is also advisable to display like groups in as close proximity as possible so that they in turn may be taken individually, collectively or in comparison with each other as desired.

One of the principal uses to which a balance sheet is put is in connection with displaying the ability of a concern to liquidate its current liabilities readily, in connection with loans from bankers, etc. Such a Balance Sheet should display prominently those items which the banker considers most important.

His loans are usually for but a short period and for this reason he is not concerned to any great extent with the fixed assets. We should, therefore, display the Current items first, placing on one side the Current Assets and on the other the Current Liabilities. By having them in juxtaposition with each other he may easily compare the one with the other and determine the excess

of the one over the other, and the possibility of meeting the various claims or any other liabilities that may be incurred from the assets available and we should display the items accordingly.

Certain of the assets are, undoubtedly, not as readily realizable as others, while some of the claims, though current, may not require attention as soon as others, therefore, we should endeavor to show the Assets in the order of their availability and the Liabilities in the order of their claims upon the estate.

Fixed Liabilities are usually secured by the Fixed Assets and it is well to place these items opposite each other for easy comparison.

In creating the capital, there may have been certain elements included which are of uncertain value, and which, at best, would only exist in an intangible form. These are, to a certain extent, offsets to the Capital and they should appear just opposite it so that, if desired, they may be mentally deducted therefrom to determine the total tangible assets in the business.

Expenses paid during one period that properly belong to another, although, possibly, not current assets, tend to reduce the requirements of current liabilities; hence, may properly be included amongst the Current Assets to facilitate the determination of the net current avails.

The general order of the groups of items as we have outlined them, is not intended to apply in all cases, for the relationship of the party for whom the balance sheet is to be prepared must be considered when determining the proper form. A bond holder, whose claim does not mature for ten or twenty years, would not be particularly interested in the current items and, for him, we should display the secured claim in comparison with

the securities held and should give these items first position.

The stockholders would be most interested in the disposition of the capital invested and would wish to learn the amount permanently invested and the proportion retained for working capital. In order that they may secure this information readily, the Capital and Fixed Liabilities would be shown first, in comparison with the Capital Assets, followed by the current items.

The following illustrates a common and very desirable form of Balance Sheet:

BALANCE SHEET OF THE "X" CO., AS AT....................................191....

CURRENT ASSETS			
Cash		X	
Investments, Bonds, etc.		X	
Bills Receivable	X		
Accounts Receivable	X		
	X		
Less Reserve for Bad Debts	X	X	
Inventories:			
M'f'd Goods	X		
Goods in Process of Manufacture	X		
Raw Material	X	X	
Investments, Real Estate, etc.		X	
Deferred Charges:			
Unexpired Insurance	X		
Rent paid in advance	X	X	XX
FIXED ASSETS			
Real Estate		X	
Buildings	X		
Machinery	X		
Furniture and Fixtures	X		
	X		
Less Res. for Dep.	X	X	XX
Goodwill		X	
			XX
			XXXX
Contingent Liabilities:			
Claim re		X	

CURRENT LIABILITIES			
Bills Payable		X	
Accounts Payable		X	
Sundry Charges Accrued:			
Int. on Bills Payable	X		
Taxes	X		
Int. on Bonds	X	X	
			XX
FIXED LIABILITIES			
First Mortgage Bonds		X	
			XX
PROPRIETORSHIP			
Capital		X	
Undivided Profits		X	XX
			XXXX

C. P. A. Questions

1. What is a (a) Balance Sheet, (b) Trial Balance? (R. I.)

2. Why must the Revenue Account be completed before a Balance Sheet can be prepared? (R. I.)

3. What are the principal differences between a trial balance taken before the books are closed and one taken directly after they are closed? (N. Y.)

4. In presenting a balance sheet, what items are matters of fact and what items are opinions, and, taken as a whole, are you, as auditor, establishing a fact or an opinion? (Ill.)

5. In drawing up a balance sheet is it desirable to show the assets and liabilities by groups, and if so, into what groups would you classify? Give reasons for your classification. (N. Y.)

6. In the preparation of a balance sheet for a manufacturing company, what general plan would you follow in determining the order of sequence in which the assets and liabilities should be stated? (N. Y.)

7. Without using figures, outline a Balance Sheet for a manufacturing corporation and state how you would treat each of the following items:

   (a) Depreciation on plant.
   (b) Interest payable accrued.
   (c) Unexpired insurance.
   (d) Provision for Bad and Doubtful Accounts Receivable. (Wash.)

8. On January 1, 1908, the condition of a small trading company as determined by an examination of that date was as follows:

Assets

Furniture and fixtures	$2,000	
Cash	500	
Notes Receivable	3,000	
Accounts Receivable	5,000	
Merchandise on hand	4,000	$14,500

Capital Stock and Liabilities

Capital Stock	$5,000	
Notes Payable	3,000	
Accounts Payable	6,000	
Surplus	500	$14,500

During the month of January the bookkeeper made all entries in the Cash Book and in the Sales Book, but made no Journal entries and did not post his Ledger. In addition to the entries appearing in the Cash Book and on the Sales Book the following transactions took place during January: Merchandise purchased on credit amounting to $6,000, notes payable amounting to $6,000 renewed, special allowance of $500 made to customers.

The Credit Sales Journal had two columns, one for the billed amounts and the other for the cost of the goods sold. The billed amount was $8,000 and the cost was $5,000.

The following statement gives a summary of the cash receipts and disbursements for January:

Cash Received:		
Collected from customers	$4,000	
Collected on note receivable	2,000	
Collected on merchandise sold and not entered on sales book (cost price $500)	600	$6,600
Cash Payments:		
Interest on notes payable	$ 45	
Salaries	500	
Rent	200	
Sundry expenses	300	
Accounts payable	5,000	$6.045

Prepare balance sheet, January 31, 1908, and statement of profit and loss based on the book value of the merchandise. (N. Y.)

9. You are the auditor of a manufacturing corporation which has been operating five years and which has, amongst other accounts, the following, viz.: Plant Account, $700,000; Reserve for Depreciation, $200,000; Surplus, $100,000. The officers ask you to certify a statement embracing the above items in the following form. viz.: Plant, $700,000; Surplus and Reserve Accounts, $300,000. State (a) whether you approve same and (b) the reasons supporting your answer. (Mass.)

10. A corporation has an issue of preferred stock entitled to cumulative dividends of 7% a year. The company has paid on this stock, dividends at the rate of 5% a year for ten years. Should the arrears of dividends appear on the balance sheet, and if so, how? (N. Y.)

11. In closing a set of books state how you would treat the following on ledger and financial statement:

Depreciation on machinery	$1,500
Expenses prepaid	500
Discount on customers' accounts 3%	1,080
Salaries and wages accrued	675

(N. Y.)

12. Criticize the following Balance Sheet:

Assets:		
Machinery, at cost		$70,000.00
Buildings, at cost		20,000.00
Good will		25,000.00
Formation expenses		3,000.00
Inventory:		
Raw material, at cost	$10,000.00	
Merchandise in process of manufacture, at cost	10,000.00	
Merchandise, finished, at selling price	23,000.00	43,000.00
Bills receivable, face value		3,500.00
Accounts receivable, face value		22,000.00
Cash		2,500.00
		$189,000.00
Liabilities:		
Capital stock	$100,000.00	
Bills payable	50,000.00	
Accounts payable	30,000.00	
Undivided profits	9,000.00	$189,000.00

(Wash.)

CHAPTER XXIV.

Classified Journals—Continued

Now that we have covered Controlling accounts and the student may be presumed to have a knowledge of the division of ledgers, we may proceed with the explanation of the more complex tabular books.

The principal advantages to be derived by using tabular books are that additions may be proven from page to page; numerous postings of a class may be treated as one item and posted as a total; and similar items may be posted in detail to certain records, and in totals, only, to other records, as in the case of a sales book, the individual items of which are posted to the debit of the customers accounts in the customers' ledger, and total posted to the credit of sales account and to the debit of the controlling account for that ledger in the general ledger. It would also be posted to the credit of the adjustment account in the customers' ledger to keep that ledger in balance, or if preferred, where a system of proof posting is used, the total of each individual proof sheet could be entered in the adjustment account, keeping the ledger in balance from day to day. The proof sheets representing the posting from each book of original entry, should be kept separate so that their total could be agreed with the total as displayed by the book of original entry.

Cash Journals.

A Cash Journal differs from an ordinary Classified Journal only to the extent that the one contains columns for the cash account and the other does not. The fact that the cash book usually requires about the same dis-

tribution columns as the journal leads to the combining of the two. This reduces the number of books and, to the inexperienced, greatly simplifies the work of keeping a record.

In general, it is prepared with debit and credit columns for each important account found in the general ledger, including cash and the accounts representing the subsidiary ledgers. Its operation is so very simple and so easily explained that, invariably where an inexperienced person is to keep the books and where the accountant is to verify the work, it is installed.

Some accountants prefer to use a book with explanation columns in the center and with all of the debit accounts on one side and all of the credit accounts on the other, as this greatly facilitates the proof of the work —the total of the columns on one side equaling the total of the columns on the other. Others prefer that the debit and credit columns for each account appear together. This seems to be the easier to operate in connection with the majority of accounts, but, as a considerable number of accounts do not receive entries except at rare intervals, other than to one side, as in the case of expense, accounts, the majority of entries to which are debits, it causes a considerable waste of space or else the elimination of the columns that are not required.

Wherever both sides of all accounts are represented it is easy to prove the entries on a page, as the debits and credits alternate across the page; but where some of the columns are omitted, confusion results in extending the amounts into the respective columns as well as in balancing.

In preparing a cash journal, columns should be provided for each subsidiary ledger, debit and credit; Discount and the Cash Accounts, debit and credit; Bank

Account for each bank, debit and credit, where they are desired, as well as for Sales, Purchases and Expense Items. It is also essential that columns, debit and credit, be provided to contain the miscellaneous items which have not been supplied with special columns.

Wherever the Miscellaneous Columns have been provided, it is not necessary to have a set of columns headed "General Ledger," for the one would contain the same class of items that appear in the other.

Offtimes entries occur in adjusting accounts which are unusual and for which columns have not been provided, as in connection with credits to expense accounts or debits to sales, and, instead of making an entry in the Miscellaneous column, a red ink entry is made in the regular column. This makes the proving of the book still more complex, unless the deductions are actually made, and if they are made it becomes rather hard to prove the ledgers or localize errors by verifying the charges and credits to the accounts for the period under review. For these reasons the red ink deductions should be avoided. As an alternative the item could be placed in the Miscellaneous column and posted separately.

In closing the Cash Journal or any Classified Journal at the end of each month, it is customary to total each column on a different line and extend the amount into the column representing the General Ledger. The total of the General Ledger, or Miscellaneous column, will then represent the total charges and credits to the General Ledger from the Journal for that period.

Ledger Journal.

Some concerns, even very large ones, are able to summarize their transactions so that no ledger is necessary for recording their business. They usually operate a

Cash Journal with columns provided for nearly all of the accounts and with Miscellaneous columns, debit and credit, for the unusual entries. They also have, usually at the top or the side of each page, distribution accounts into which the balances brought forward from previous pages, may be carried, as well as the items appearing on that page in the Miscellaneous column.

To illustrate: A Cash Journal has been provided as above, with columns for Cash, Bank, Expense, Sales, Purchases, Customers, Discounts, etc., and also Miscellaneous items. Adjacent to the Miscellaneous columns is a narrow portion provided with columns similar to a ledger and in this section are found accounts with Sundries, including Capital, Surplus, Plant, Inventories, etc., which would possibly not receive many additional entries and which might be fully explained in some other portion of the book, Bills Receivable, Bills Payable, Miscellaneous Income or Expense Accounts, etc. Into these accounts all items appearing in the Miscellaneous columns are carried so that at all times the adjacent ledger accounts will balance the Miscellaneous columns. Whenever it becomes necessary to carry the footings forward to another page, the balances of the ledger accounts must be carried also, unless short leaves have been provided for the various Journal Columns and the Ledger portion of the book is allowed to extend beyond them.

Voucher Register.

The tendency of modern times is to eliminate as much of the detail work as is possible in connection with accounts. Much was accomplished upon the advent of controlling accounts, which allow the books of large concerns to be divided amongst a number of operators or

placed in the cities of easiest access to the various fields of operation, and upon the adoption of tabular books, which reduced the volume of posting and improved the accuracy of the work, but undoubtedly the greatest advance of all is the voucher system of keeping accounts with creditors.

The great advantages of the voucher system are that practically no posting is required; all details relative to incurring a claim, receiving and apportioning the benefits and its ultimate payment with the acknowledgment of the payee and the authority and verification of each act in connection with the claim are recorded and retained upon a few slips of paper; no unauthorized claim can be paid; the effectiveness of an audit is greatly increased and the expense thereof greatly reduced.

Its disadvantages are that a considerable expense is entailed on account of filing and recording the vouchers and in the labor involved in having them vised by the various officials, and also that no ledger accounts are available for reference in future years.

In operation, the system consists of preparing a voucher for each claim the moment it is received and of having every step in the progress of the claim and the articles it represents recorded and vised by the persons responsible. Each claim is considered as a separate account and is treated much the same as "Sundry Debtors."

The forms used to properly record the transactions vary with every business. They usually consist of a check and a voucher or possibly a combination of the two.

The check might be the standard form with the addition of a voucher number for cross reference, or it might contain a summary of the transaction, either on its face or on the back. It often includes a form of re-

ceipt for the signature of the payee, but as this does not, except in the case of disputed claims, serve to bind the payee any stronger, the plan is gradully going out of use.

The combined check and voucher is likewise disappearing, principally on account of the objections advanced by bankers owing to the labor involved in handling it and the tendency of the makers to increase his responsibility by demanding that he see that it is properly receipted, etc., before paying, and also because the record of the transaction, discounts, etc., becomes, to a certain extent, public property.

The most satisfactory form of voucher and check is the one that leaves with the payee a record of the account or items that the check is intended to pay and which does not encumber the bank with any paper other than the standard check and which also retains with the original voucher an exact copy of the check.

We attach forms herewith that supply the requirements and which are intended for use with a typewriter, preferably one equipped with two sets of type, one gothic and the other pin-point and a lawyer's indelible ribbon, the writing of which cannot be removed either with an eraser or with chemicals after it has had an opportunity to work into the paper.

Seattle, Wash., ...191...... Check #.........

Pay to the order of...Vouch. #.........

.... Dollars $.........

To The First National Bank, The Western Asphalt Co.,
Seattle, Wash.

..................................Pres.

..................................Treas.

— — — — — — — — — — — — — — — — — —

Detach above check and retain this remittance
sheet for future reference

Statement of accounts paid........................191......Vouch. #.........
by the Western Asphalt Co., Seattle, Wash.

Seattle, Wash., ...191...... Check #..........

.... Vouch. #..........

.... Dollars $..............

Expenditure authorized by

....

Extensions O. K.

....

Goods received and checked

....

Prices and Terms O. K.

....

Statement of accounts paid..........................191......Vouch. #..........
by the Western Asphalt Co., Seattle, Wash.

#.......

....

....

....

Distribution:

Expense:

a. Office Sal. $
b. Rent
c. Interest
d. Bank Disc.
e. Stationery
f. Postage
g. Light and Heat
h. Advertising
j. Misc.

Hauling:

a. Teamsters $
b. Stable Exp.
c. Cartage
d.
e.
f.
g.
h.
j. Misc.

Rock:

a. Rip Rap, Labor $
b. Crusher, Labor
c.
d.
e.
f. Powder
g. Towing
h. Scows
j. Misc.

Sand and Gravel:

a. Cartage $
b. Pit Labor
c.
d.
e.
f.
g. Towing
h. Scows
j. Misc.

Contracts:

#.................
a. Grade $
b. Base
c. Curb
d. Brick Paving
e. Extra
f. Binder
g. Surface
h.
j. Misc.

#.................
a. Grade $
b. Base
c. Curb
d. Brick Paving
e. Extra
f. Binder
g. Surface
h.
j. Misc.

#.................
a. Grade $
b. Base
c. Curb
d. Brick Paving
e. Extra
f. Binder
g. Surface
h.
j. Misc.

#.................
a. $
b.
c.
d.
e.
f.
g.
h.
j. Misc.

Care should be taken to see that the printer arranges both sheets so they will align properly when in the machine.

The complete account of the transaction having been prepared, it becomes necessary to arrange some plan to properly record the various accounts for future reference and to incorporate them in the general books.

This is accomplished by the aid of a Voucher Record or Register which, to be on the double entry principal, must provide for debit and credit entries, and, to provide for the easy distribution of the items and their proof, should be of the tabular plan.

The voucher represents an Accounts Payable, hence, in lieu of the Accounts Payable Account, we will have an account in our General Ledger headed Vouchers Payable. The Voucher Record will be the original entry for the credits to this account, therefore, we must provide a column for these credits. The credits will be counterbalanced not only by purchases but also by expense or other charges of every kind; therefore, we must provide columns for receiving these. Many of the items will be closely related, therefore, we should group the columns under appropriate headings to facilitate the handling of the items and the construction of accounts.

In connection with the record of the voucher we should allow for the date, number, name of the creditor, discount, amount of the claim and the time and manner of payment. To provide for the charges to the various accounts we need only provide columns for their distribution and also a special set of columns to contain those items for which no columns have been provided.

A voucher record provided as outlined above may have columns for:

Issue:
- Date
- Voucher No.
- Creditor
- Discount on Purchases
- Amount

Payment:
- Date or
- Check #

Distribution:
- Purchases
  - Raw Material
  - Finished Goods,
  - In Freight
  - Duty
- General Expense
  - Salaries
  - Rent
  - Postage
  - Stationery
- Selling Expense
  - Advertising
  - Salaries
  - Traveling
  - Commission
  - Out Freight
  - Rent
- Miscellaneous
  - Account
  - Folio
  - Amount

Such a voucher record only provides for the prompt payment of claims and a voucher will be required immediately that a claim is received.

In many concerns certain liabilities are incurred which are to be of long standing and which it may or may not be desirable to record on a voucher. To accommodate such transactions and also to provide for Journal Voucher adjustments we should provide additional columns adjacent to the columns intended to contain the credits to Vouchers Payable. The columns should be near the Vouchers Payable column so that all credit columns will be together, thereby facilitating the proving of the pages. These extra columns will contain credits to miscellaneous accounts in the general ledger and should be headed as follows:

General Ledger Account, Credit; Folio; Amount.

Voucher Distribution Ledger or Journal.

The greatest objections to the Voucher System are that usually, an enormous book is used to record and distribute the amounts of the vouchers; that such a book must be specially made at considerable expense; that it is unwieldy and cumbersome to handle; and, that the greater portion of each page is not written upon.

These objections may be abated by the adoption of a Voucher Distribution Ledger. Such a Ledger contains a sheet for each of the principal classifications of charges and each sheet is provided with columns for each subdivision of the principal account that is desired. The Voucher Record then only requires one column for each group of accounts instead of one for each subdivision, the Distribution Ledger containing an analysis of the individual items in detail.

To illustrate:

In a General Expense column in the Voucher Record we may include all items relating to General Expense, irrespective of department or kind.

On the Distribution Ledger Sheet the same items will again appear, but carefully classified, possibly under headings:

(a) Office Salaries
(b) Rent
(c) Charity
(d) Telephones & Telegrams
(e) Stationery
(f) Postage
(g) Light & Heat
(h) Janitor & Supplies
(j) Miscellaneous

The total of the items on the distribution sheet must equal the total of the column containing the same items in the Voucher Record and, instead of posting the total of the items as appearing in the Voucher Record to the General Ledger, the total of the respective columns are posted from the Distribution Ledger.

In order to reduce the expense of preparing the sheets for the Voucher Distribution Ledger, a plan of lettering the columns may be used to represent the various subdivisions of each account, then the same style of ledger sheet will apply for each classification; the various letters designating the exact sub-division of the account to be charged as determined by reference to the distribution analysis of the voucher, on the back of the voucher.

To illustrate:

If the Distribution Ledger Sheet is to be used to record expense items, column "a" will contain Office Salaries, but, if the sheet is to be used to contain Hauling Expenditures, columns "a" will answer for Teamsters' Salaries, etc.

An alternative method is to provide a separate sheet in the Distribution Ledger for each sub-account and to

have columns ruled to contain the entries for each month separately. At the end of each month the totals of the entries made on each sheet during the month are carried forward to a special Summary Sheet which contains a recap of the items of a class, classified according to months. When totaled, the monthly column of the Summary Sheet should equal the amount of the controlling column in the Voucher Record.

The advantage of this method is that the results of each month may be easily compared with other similar periods and, if Summary Sheets of different lengths are used, the results of several years may be displayed at once without rewriting.

C. P. A. Questions

1. What are the advantages of a colunmar cash book? (R. I.)

2. Give heading for a combined Cash Book and Journal and state what you consider to be the advantages, if any, and disadvantages, if any, of such a book. (Wash.)

3. Rule a cash book to provide for controlling accounts of debtors and creditors, also for discounts in settlement of both receivable and payable accounts. (N. Y.)

4. What method would you recommend for recording the cash receipts on the general cash book of a company operating 10 branch houses, each depositing its daily receipts in a separate bank? Describe fully. (N. Y.)

5. Describe the system of running a discount column in the cash book and show how the entries are made both in the general ledger and in the subsidiary ledger. (R. I.)

6. What are the functions of the cash book? Describe the peculiarities of one or more cash books with which you are familiar. (N. Y.)

7. What is the advantage of having a cash account in the ledger? (N. Y.)

8. What should a cash account in the ledger show? (N. Y.)

9. Draw up a form of Cash Book for a corporation where a complete Voucher System is in operation and where the following conditions exist: Two Country and Two City ledgers are kept, also an operating ledger and a

private ledger. It is a practice of a majority of the customers to take advantage of the discounts given for cash in thirty days. It is also the custom of the corporation to deduct the discount they intend to take advantage of on goods purchased by them, by means of a column in their voucher journal. Their business is such that 20% of their sales are made for cash and 10% on C. O. D's. The chief expenditures of the corporation are for woolen fabrics, notions, fuel, light and labor. (Ill.)

10. A company, engaged in the manufacture and sale of products, desire a separation of their expenses under proper divisional or department heads. Illustrate, make your own selection of some manufacturing business, and prepare classification of accounts. What ledger headings would you use? (Ill.)

11. Submit rulings for correlated cash book, purchase book and sales book, to classify purchases and sales in three divisions and to provide for miscellaneous purchases. Provision must be made to record cash sales in sales book and in cash book and for customers' and creditors' controlling accounts. Submit "pro forma" monthly summary entries for the foregoing books. (N. Y.)

12. A retailer, who employs four salesmen behind the counter, sells for cash mostly, but a limited amount for credit. He rents the store room. His knowledge of accounts is limited, but he can make plain debit and credit entry. He knows which side of the cash book is debit and which is credit. He knows how to post to the ledger. Understands nothing about opening and closing the books. Formulate and describe the simplest method on which to conduct his books, he to keep them during the year, you to audit and balance them once a year, and take off a general statement and trading account. (Penn.)

13. Describe the various uses of the journal. (N. Y.)

14. Prepare form of book for a small business combining general ledger, general journal and cash book in one binding to show transactions involving all three on each double page. (Ill.)

15. Give a short statement covering the advantages or disadvantages of a voucher system and of tabular books. (Penn.)

16. Prepare a ruling for an invoice book to provide for total monthly charges to three material accounts and two expense accounts, and also to detail postings to sundry accounts of capital and revenue outlay. (N. Y.)

17. Prepare a ruling for a salesbook to provide (1) total monthly postings to three goods accounts, (2) the separation of cash sales from charge sales, (3) supplementary distribution of sales among four salesmen's columns. (N. Y.)

18. Prepare a form of monthly summary journal entries for the two foregoing books of original entry. (N. Y.)

19. Draw up a form of "Check Register" to be used in conjunction with a complete Voucher System, it being intended that the Check Register shall take the place of the disbursement side of the Cash Book and shall also record the deposits and withdrawals in three different bank accounts. Discounts on goods purchased to be handled through the Voucher Journal. (Ill.)

20. Give headings for a Voucher Record Book suitable to any business with which you are acquainted. State briefly some advantages, if any, and disadvantages, if any, of the Voucher System. (Wash.)

21. A wholesale house has on its books 200 indi-

vidual accounts with creditors, 500 with city customers, and 1,500 with county customers, besides about 75 impersonal, or representative accounts. Owing to the method of bookkeeping in force, it is necessary, in order to ascertain the amount of Accounts Receivable or Payable, to take off a complete list of the accounts in question. You are called upon to advise how this difficulty can be overcome, and also as to whether the bookkeeping work on the Accounts Payable cannot be reduced, having regard to the fact that the firm discounts all its bills. Embody your suggestions in a brief report. (Wash.)

22. Describe what is known as the Voucher System. Can a Voucher System be used to advantage in every business? If not, state certain conditions which would militate against it. (Ill.)

23. A criticism often heard in respect to the Voucher System is that it entails too much red tape. Is this a just criticism, and if so, under what circumstances? (Ill.)

24. State the advantages of using columns in an invoice or voucher register for distributing the expenditures. When would it be advisable to use a distribution ledger? (N. Y.)

25. Rule in proper form, a double page of a voucher record or register inserting at least three items as they should appear in the record, showing payment of those items. Show the title of each of the columns. (N. Y.)

26. What is meant by the voucher system of accounts? Why is it particularly adapted to large corporations or manufacturing concerns?

Illustrate the system by making one voucher, that of Peters & Boynton, and by entering in the necessary books of the Anderson Foundry Co., the following items:

6/2 Received from Peters & Boynton, Pittsburg, Pa., 12 tons pig iron, $15.00; Term 2/5, n/30.

6/3 Bought of Holman & Co., 500 tons coal @ $6.00, for smelting furnace.

6/4 Paid workmen, as per pay roll $898.50.

6/5 Rec'd bill from United Hdw. Co. for putting new roof on foundry, $250.00.

6/7 Paid Peters & Boynton for invoice of 6/2. (N. Y.)

27. Draw up a form for the record of household accounts, or of a small trading business, that may be used as a combined cash book, journal and general ledger. Give the headings and provide five distribution columns for expenditures and also columns for controlling accounts for both accounts payable and accounts receivable. (N. Y.)

28. Compare a simple arrangement of accounts, as for example, capital, cash, merchandise, personal, expense, profit and loss, with some other scheme of accounts expanded to meet the demands of present day requirements. Describe the possibilities and advantages of the more modern scheme. (N. Y.)

29. Compare the advantages and disadvantages of a "Voucher Record System" as opposed to an Accounts Payable or Creditors' Ledger System with Purchase Journal, and state what you would recommend. (Ill.)

INDEX